



A Weekly Journal of Pharmacy and the Drug-trade.

ESTABLISHED 1859.

Postal Address:	Telegraphic Address:	Telephone Number:
42 Cannon Street, London, E.C.	"Chemicus London."	Bank 852.

THIS JOURNAL is regularly supplied by subscription to the whole of the Members of SIXTEEN PHARMACEUTICAL SOCIETIES in the British Empire. The associate Journal, *The Chemist and Druggist of Australasia*, published at Melbourne and Sydney, is also supplied to all Australasian subscribers.

SUBSCRIPTION RATES.

Ten shillings a year in advance, post free to any part of the world, including a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next published. Single copy, 4d.; Summer or Winter Number, 1s.; DIARY, 3s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

Terms for advertising may be obtained on application to the Publisher, C. & D., 42 Cannon Street, London, E.C.

Prix de l'abonnement: The Chemist and Druggist une fois par semaine, et l'agenda du Chemist and Druggist une fois par an, 12.50 francs par an, franco.

Abonnementspreis: The Chemist and Druggist einmal wöchentlich, und Notizkalender des Chemist and Druggist einmal im Jahre, 10 Mark jährlich, frei in's Haus geliefert.

Precio de suscripción: The Chemist and Druggist una vez por semana, y el Agenda del Chemist and Druggist una vez al año, 12.50 pesetas anuales, franco.

CONTENTS: Vol. LVI. No. 12 (Series No. 1,052).

PAGE	PAGE		
American Notes.....	498	Irish News	494
Australasian News	496	Legal Reports	501
Bankruptcy Report	503	Marriage	503
Business Changes	504	New Companies and Com- pany News	519
Chemists' Defence Associa- tion	522	New York Notes	497
Colonial and Foreign News	496	Observations and Reflec- tions	505
Coming Events	526	Personalities	500
Companies Bill	511	Pharmaceutical Society of Great Britain:—	
Corner for Students	504	North British Branch ...	517
Correspondence:— Letters.....	520	Pharmaceutical Society of Ireland:—	
Deaths	503	Evening Meeting	497
Deed of Arrangement	503	Recent Wills	503
Editorial Comments:— Evolution in Pharmacy	506	Scotch News	494
Public Analysts' Quali- fications	507	Trade Marks Applied For	518
Golden Syrup.....	507	Trade Notes	500
Notes	508	Trade Report	523
English News.....	492	War Notes	498
French News	495	Westminster Wisdom	510
Gazette	502	Winter Session	512

COLONIAL TRADE.

If there is one thing more certain than another regarding the future export trade of the United Kingdom, it is that the population of our Empire beyond the seas will be our best customers. The national statistics prove this, the imperialistic spirit maintains it, and it behoves manufacturers and merchants to encourage it. The encouragement of colonial trade has been one of THE CHEMIST AND DRUGGIST'S strong points from the outset. Through our annual Colonial Issue we give an exceptional opportunity for advertisers to increase their business with the colonies. This issue will be on April 28, and, in addition to those who receive it weekly, it will be sent to all buyers of druggists' goods in India, Burmah, Straits Settlements, South Africa, China, Japan, and the West Indies. The publisher will give any inquirer information regarding this important issue.

Summary.

SOME PARTICULARS about the Paris Exhibition are given on p. 495 and p. 508.

IT IS REPORTED that bubonic-plague cases have occurred in Australia (p. 496).

THE BERLIN ACADEMY OF SCIENCE has been in existence two hundred years (p. 509).

NEW BLOOD for the Pharmaceutical Council is advocated by several correspondents (p. 520).

TWO CORRESPONDENTS suggest improvements in the pharmaceutical examinations (p. 521).

WINE-LICENCES to West London chemists are rather numerous this week (p. 493).

THE CAPITAL of Wm. Radam's Mierobe-killer Company has been reduced from 35,000*l.* to 22,500*l.* (p. 519).

WE print a number of letters from M.P.'s in regard to the Companies Bill. Matters still look hopeful (p. 511).

MR. T. H. WARDLEWORTH gave the Liverpool Chemists' Association some of his experiences in the Western Hemisphere (p. 513).

THE PRESIDENT OF THE PHARMACEUTICAL SOCIETY was drawn at Westbourne Grove on Wednesday evening in respect to the Companies Bill (p. 514).

PARLIAMENT has read petroleum, shop-hours, and veterinary-surgeons Bills for the first time since our last issue. Particulars about them on p. 510.

A NEW WAY to make hydrobromic acid is proposed by Dr. Scott of the Davy-Faraday laboratory, viz., interaction of bromine and sulphurous acid (p. 513).

THE PHARMACEUTICAL SOCIETY has had to sue a Birmingham assistant for a penalty which he had incurred for infringing the Pharmacy Act (p. 502).

ALUM BAKING-POWDER has got a number of Wiltshire retailers into trouble (p. 502). We suggest that a better defence in such cases is wanted (p. 508).

THE CHEMISTS' DEFENCE ASSOCIATION (LIMITED) now has a regularly constituted board of directors, a solicitor, an analyst, and prospects of higher things (p. 522).

"GOLDEN SYRUP" exclusively from the cane, has been the exception rather than the rule during the past twenty years. Some facts about the matter are recorded on p. 507.

PUBLIC ANALYSTS in England must henceforth hold the A.I.C. or F.I.C., and the microscopy and therapeutics certificate. So the Local Government Board has decided (p. 507).

DR. HALL, an English physician who was in charge of the Boer hospital at Bloemfontein, has related his experience to our Cape correspondent. We print it on p. 493 with his portrait.

AN INSTRUCTIVE PAPER on food-preservatives, read before the Society of Arts by Dr. Rideal, is reported on p. 512. Dr. Attfield and Mr. Lloyd Howard joined in the discussion.

A CURIOUS THING has happened in Dublin. There was an evening meeting of the Pharmaceutical Society, but Dr. McWalter, the essayist, did not turn up. His paper, nevertheless, is summarised on p. 497.

DR. HORN'S HAIR-SPECIALITIES have been in the High Court during the past week. Mr. Cassie, the maker of them, objects to Dr. Horn making certain preparations himself, and Mr. Justice Kekewich agrees with Mr. Cassie (p. 501).

BUSINESS in the drug and chemical markets is exceptionally quiet, the only item of interest being quinine, which will probably be reduced by makers before the week is over. German refined camphor has been advanced (p. 523).

RECIPROCITY was one of the topics at the Western Chemists' Association meeting on Wednesday evening, when Mr. Chater, on behalf of Queensland, expressed colonial views on the subject, and had the sympathy of the meeting (p. 514).

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brixton and the War Widows' Fund.

Brixton and Clapham and district held a torchlight carnival on Wednesday and Thursday last week with the hope of raising 40,000 shillings for the Widows' and Orphans' Fund. The function was a most successful one, shops and houses illuminating and decorating their premises *en route*. The display of the London School of Pharmacy in the Clapham Road was one of the most striking—a search-light being employed. Among the set pieces was a car representing the surrender of Cronje, got up by Parke's Drug Stores.

An Agricultural Diploma.

The Royal Agricultural Society of England and the Highland and Agricultural Society of Scotland have joined forces in the establishment of an examination in the science and practice of agriculture, to take the place of the separate examinations which have heretofore been held by the two societies independently. Candidates who pass this examination, which is under the management of the National Agricultural Examination Board appointed by the two societies, are to receive the National Diploma in Agriculture. A certain percentage of the maximum number of marks in each subject will entitle the candidate to a diploma with honours, and a gold medal will be awarded to the candidate who is highest on the honours-list. The first examination will be held at the Yorkshire College, Leeds, on April 30 and five following days. Applications for this examination must be made not later than March 31.

Hospital Reconstruction.

A Vice-President of the Dental Hospital of London, Leicester Square, W.C., has presented 100*l.* as a special contribution to the fund for rebuilding the hospital, with a promise that, provided an additional 800*l.* be collected within a reasonable time, he will give another 100*l.* to make the total 1,000*l.* The committee are appealing for contributions to enable them to avail themselves of this offer, and donations will be received by the Secretary, at the hospital, or by Messrs. Barclay & Co. (Limited), bankers, 6 Pall Mall East, S.W.

Was he a Homœopath?

At an inquest held at Hull on March 15, relative to the death of a married woman named Nelthorpe, it appeared that deceased had confessed to having taken some matches. Her husband deposed that he sent for the doctor, but after giving her one dose of the medicine supplied she lost consciousness. The doctor (Mr. Martin) came again, and said she was in a serious condition, and ordered "oil of phosphorus," which witness tried without success to get from the chemist's. He stated that the doctor told him to give deceased forty drops of the phosphorus in two teaspoonfuls of water. The doctor did not write down the quantity of oil to be given, but he was sure he said forty and not four drops. Dr. Faulkner, who attended deceased until her death, said that death was due to phosphorus poisoning. A juror asked if oil of phosphorus was likely to do her any good, but Dr. Faulkner replied that he never heard of it being used in a case of phosphorus poisoning. The Coroner regretted that Dr. Martin had not attended the inquest in his own interests, and a verdict of suicide whilst of unsound mind was returned.

Jersey Jottings.

Mr. J. J. Dupré, of Lucc's Eau-de-Cologne Company (Limited), Jersey and Southampton, was last week elected on the Council of the Jersey Chamber of Commerce. Mr. Dupré suggested inviting the Associated Chambers of Commerce to hold their meeting in Jersey next year, and the matter has been referred to the Council for due consideration.

Judge W. Duret Aubin, M.B., who introduced the Jersey Pharmacy Act, brought before the Jersey Parliament on March 13 a Bill for the repression of fraud in the sale of fertilisers and feeding-stuffs. The preamble was duly adopted, and the Bill was then referred to the States' Agricultural Committee with instructions to report.

At a meeting of the Jersey Early-closing Association held last week, it was stated that several chemists are anxious to obtain this respite from their labour, but up to the present the Association had not been able to carry through any arrangement on their behalf.

Analysts' Appointments.

Mr. Otto Hehner has been re-appointed public and district analyst for the Isle of Wight.

Dr. J. A. Voelcker has been appointed district analyst under the Fertilisers and Feeding Stuffs Act to the Berkshire County Council.

Drug-contracts.

The following contracts with public bodies have been ratified:—

CANNOCK.—Mr. T. W. Garland, pharmaceutical chemist, Cannock, paraffin oil, 8*d.* per gal.; Calvert's No. 9 soap, 28*s.* per cwt.; Calvert's soft soap, 24*s.* per cwt.; linseed meal, 2*d.* per lb.

DARTFORD.—Messrs. McDougall Brothers, 10 Mark Lane, E.C., for disinfectants. Messrs. Baiss Brothers & Stevenson, 4 Jewry Street, E.C., for drugs for the workhouse.

EAST ASHFORD.—Mr. F. G. Smith, of Boughton Alup, for carbolic soap, at 27*s.* 6*d.* per cwt.

GRAVESEND.—Mr. W. Batchelor, chemist and druggist, for drugs to the Corporation.

NEWPORT - UPON - USK WORKHOUSE AND CAERLEON SCHOOLS.—Messrs. J. Phillips & Son, chemists and druggists, Commercial Street, Newport, for drugs, sundries, and surgical dressings for the Newport Workhouse and Caerleon Industrial Schools.

NOTTINGHAM.—Mr. J. Wilford for the supply of drugs, for the ensuing six months at 40*p.*

PONTYPOOL.—Mr. G. C. Wood, chemist, Pontypool, for drugs, for the workhouse.

ROMFORD.—Mr. J. W. Lasham, for drugs to the Workhouse.

STEYNING.—Mr. Whitmell, Shoreham, for Benger's food, at 14*s.* per doz.; borax, 3*d.* per lb.; brimstone, 1*d.* per lb.; crushed linseed, 2*d.* per lb.; McDougall's H & H carbolic soap, 31*s.* per cwt.; Calvert's No. 5 carbolic soap, 28*s.* per cwt.; Calvert's prickly heat carbolic soap, 70*s.* per cwt.; turpentine, 4*s.* 6*d.* per gal.; Evershed's XX or Knight's extra pale soap, 31*s.* per cwt. Messrs. Ellis, Beale & Co., of Brighton, supply soda-water in syphons at 3*s.* per dozen.

SWAFFHAM.—Messrs. Bell & Knights, for drugs to the workhouse.

WAKEFIELD.—Mr. William Powell, chemist and druggist, for medical and surgical appliances to the Workhouse.

YARMOUTH.—Mr. J. J. Burnby, chemist and druggist, St. Nicholas' Road, for cod-liver oil to the workhouse, at 4*s.* 3*d.* per gal.

Carbolic-acid Victims.

Thomas Ball, a gardener in the employment of a gentleman at Weastre, took a drink of carbolic acid used for disinfecting purposes, and died shortly afterwards.

Harriet Pink (43), of Salford, poisoned herself with carbolic acid on March 17, and died in the Royal Hospital two hours afterwards.

Chemists as Public Men.

Mr. W. T. Gent, analyst, has been elected on Gainsborough Rural District Council.

The following chemists have been elected members of Boards of Guardians in their respective districts:—

Mr. Thos. Carter, chemist and druggist, Blackpool.

Mr. John Dolbear, pharmaceutical chemist, Oxford.

Mr. Percy Knott, chemist and druggist, Bolton.

Mr. James Ross Gwatkin, chemist and druggist, Brighton.

Mr. A. E. Ekins, pharmaceutical chemist, St. Albans.

The Birkenhead Dispenser.

The Birkenhead Guardians at the meeting on March 20 had before them the case of Mr. Preece, the late dispenser. First they had to settle the bill for 243*l.* 14*s.* 4*d.*, the costs of appearing at the Liverpool Assizes in defence of Dr. Martin against Messrs. Evans, Sons, & Co. This is to be charged to the rates. As to Mr. Preece himself, it will be remembered that, dissatisfied with his conduct as dispenser at the Workhouse, the Guardians called upon him to resign, which he declined to do, and appealed to the Local Government Board. The Board have now written to the Guardians saying that they have given the subject their consideration, and desire me to state that they do not consider there is evidence to show that Mr. Preece has been guilty of any such conduct as would justify the Board in issuing an order for his dismissal. There was an attempt at the meeting of the Guardians to discuss this matter, but the Chairman would not allow it. Mr. Davies desired to know what Mr. Preece's position would now be. The Clerk said he would simply continue to act as dispenser, as he had done all along; and the Chairman added later: The dispenser has never left our employ; he is still in our employ; and the matter is ended. Next business, please!

L.C.C. and London Water.

At a meeting of the London County Council on March 20, the Water Committee recommended that the chemists of the Council be authorised to continue taking samples of London water for analysis for a further period of six months, at an expenditure of 37*l.* a week. Dr. White moved, as an amendment, that the recommendation be referred back to the committee, with instructions to report to the Council as to the expediency and cost of a permanent arrangement for analysing the water supplied by the companies. He said that some years ago the expenditure was allowed because the chemist had got a new filter to detect the presence of suspended matter in water, and he should have thought the time would have been sufficient by now to carry out the experiment. He thought it a wasteful and extravagant way of doing business. Already nearly 3,000*l.* had been spent in this way. Mr. Bond, M.P., seconded the amendment. After considerable discussion, the amendment was defeated.

Presentation to Lord Avebury.

A feature of the annual meeting of the Early-closing Association held at St. Martin's Town Hall, Charing Cross, on March 22, was the presentation of an address and vases to Lord Avebury (better known as Sir John Lubbock). The Bishop of London who was in the chair made the presentation, and referred to the important part Lord Avebury had taken in promoting legislature for benefiting shop assistants and others engaged in shops and warehouses. It had been Lord Avebury's good fortune, the address said, to realise that hard work was sweetened by relaxation, and his success in that noble lesson afforded encouragement to all who were trying to increase the pleasures of their fellow creatures.

The annual report of the Association referred in congratulatory terms to the passing of the Shop Seats Act, a measure promoted by the Society and introduced into the House of Lords by the late Duke of Westminster, and into the House of Commons by Lord Avebury, Patron and President respectively of the Society.

Cresswell's Fire.

As briefly intimated last week a serious fire occurred on the afternoon of March 15 on the premises of Messrs. Cresswell Brothers & Schmitz, sponge-merchants, 1 and 2 Red Lion Square, W.C. It was fortunately confined to the No. 1 building, which consists of a warehouse of four floors and a basement. Some eighty employés, including a number of women, were at work in the building when the flames were discovered, and so rapidly did they spread that several escaped with great difficulty, as the staircases were almost impassable owing to the dense smoke. Indeed, it was said that by the time the first fire-engine arrived two girls still remained in the basement, imprisoned by the flames and smoke on the staircase. The firemen promptly smashed in the iron-grating in the street, and pulled the girls through just in time. The fire appears to have originated in a straw-room in the basement of the building, and by the time the firemen got to work the building was well ablaze, and the fire was not

put out until nearly the whole place had been gutted and the contents destroyed. It is not yet possible to estimate the total damage, but it is fully covered by insurance. A visit to the premises next day by our reporter showed that the members of the firm were busy setting their house in order again, for the offices on the ground floor to the left of the fire were intact, except for slight damage by water. Walking round with Mr. Ernest Cresswell our representative noticed that some of the window-display figures in sponge had been destroyed, including one of John Bull, who (tell it not in Gaul) had been decapitated. His body was found reclining on a stack of damaged loofahs. Of more consequence than this was the damage done to Roman "amphore," of which the firm had some choice examples. The premises which have been destroyed were of historical interest, as shortly after the Crimean war they were devoted to an infirmary, under the auspices of Miss Florence Nightingale, for the treatment of ulcers of the leg and similar troubles. Mr. Cresswell informs us that business was not seriously disturbed by the fire, as the firm hold a large reserve stock of all kinds of sponges at 18 and 19 Red Lion Square and at the wharves, where they are just landing several hundred cases and bales from the Mediterranean and West Indies.

Chemists' Licences.

At the Kensington Licensing Sessions on March 20 the following chemists had their wine-licences renewed:—

Mr. A. Dyson, 35 Gloucester Road.
Mr. F. Wilde, 100 Brompton Road.
Mr. J. M. Hughes, 48 Fulham Road.
Mr. J. W. Shaw, 4 Edwardes Terrace.
Mr. E. A. Turner, 280 Fulham Road.
Mr. W. R. Hoare, 121 Cornwall Road.
Mr. John Selley, 142 Earl's Court Road.
Mr. F. Tupholme, 1 Coleherne Terrace.
Mr. E. W. Gough, 83 Gloucester Road.
Mr. R. A. Robinson, 195 Brompton Road.
Mr. R. S. Damency, 87 Abingdon Road.
Mr. C. Davies, 194 Holland Park Avenue.
Mr. P. Bolton, 1 Sussex Place, Kensington.
Mr. W. Thomas, 105 and 107 Talbot Road.
Mr. T. Squire, 22 High Street, Notting Hill.
Mr. E. H. C. Grossman, 11 Station Buildings.
Mr. J. J. Thoraas, 99 High Street, Notting Hill.
Mr. J. F. Harrington, 45 Kensington High Street.
Mr. H. C. Stratford, 221 High Street, Notting Hill.
Messrs. V. L. Fellows & W. H. Bate, 44 Harrington Road.
Mr. H. Zusman, Gloucester Road and Ladbroke Grove.
Messrs. J. J. & G. P. Buckley, 111 Earl's Court Road.

At Chelsea the following were granted:—

Mr. C. Bridges, 24 Sloane Street.
Mr. E. M. Heard, 19 King's Road.
Mr. A. S. Amoore, 173 Sloane Street.
Mr. A. Wiggington, 137 Sloane Street.

At Fulham:—

Mr. E. H. Lee, 686 Fulham Road.
Mr. J. Murison, 336A North End Road.
Mr. F. P. Drabble, 1 Baron's Court Road.
Mr. J. H. Tasker, 146 Wandsworth Bridge Road.

At Hammersmith:—

Mr. W. R. Hoare, 90 King Street.
Mr. J. Murison, 6 The Broadway.
Mr. J. A. Barnett, 97 Uxbridge Road.
Mr. F. Williams, 246 Goldhawk Road.
Mr. W. H. Crosland 192 Uxbridge Road.
Mr. W. E. D. Shirtliff, 66 Goldhawk Road.

At Guildford:—

Mr. G. C. Dusart (Sussex Drug Company, Limited), High Street.

At Tower Hamlets:—

Messrs. Potter & Clarke, Artillery Lane, E.

Was it Labelled?

At an inquest held at Bromley on March 14 on the body of Wm. Hutson, a jobbing-gardener, who died from drinking a quantity of an arsenical weed-killer, Dr. Yolland, a medical witness, stated that weed-killer was the only form in which such a large quantity of arsenic could be bought.

Prussic-acid Poisonings.

On March 10 Alfred Henry Harkness, described as a chemist and druggist, but whose name does not appear on the register, was found in a dying condition in a railway-carriage at Whitley. Prussic-acid poisoning was the cause of death.

Dr. Sharples, of Castleton, was found dead in his surgery on March 13, and at the inquest on March 15 it was stated that death was due to prussic-acid poisoning.

A Chemist's Stock Sold.

The stock-in-trade and effects of Mr. W. Wyles, pharmaceutical chemist, Kimberley Terrace, Great Yarmouth, have this week been disposed of by auction.

Profiting by Adversity.

On March 21, one of the plate-glass windows at Mr. G. S. V. Wills's pharmacy, South Croydon, was entered by an erratic horse attached to a cart, and considerable damage was caused. This is the second visitation of the kind Mr. Wills has experienced in four months, and the sympathetic onlookers became so numerous, that Mr. E. G. Price, the manager, fixed up the following:—

SPECIAL NOTICE.

This window will soon be repaired, and dressed with samples of spring medicines, sulphur-tablets, blood and purifying mixture, sarsaparilla, &c., at popular prices.

Many passers-by paused to read this guileless announcement.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Dr. Frazer's Books.

The library of the late Dr. Wm. Frazer, Dublin, is to be sold shortly by Messrs. Sotheby. Dr. Frazer possessed one of the finest private collections in Europe of early Continental printing, and owned as well some unique copies of volumes of early Irish music.

Going to Headquarters.

The medical officers of the Cork Union have asked the Guardians if, as they refuse to grant them medicines and surgical requisites not in the L.G.B. schedule, they will allow them to apply direct to the Local Government Board on the subject. The Guardians have agreed to this.

Ten Miles to Go for Medicine.

Complaint was made at the last meeting of the Newcastle West Board of Guardians that dispensary-patients at Tuar are obliged to go ten miles into Abbeyfeale to obtain medicines prescribed for them at the former place. The Chairman said the hardship ought not to be allowed to continue, and it was resolved in future to keep all necessary medicines at Tuar dispensary, so that the poor would be served as the Medical Charities Acts intended.

Cyanide-poisoning.

The wife of a military tailor named Ryan committed suicide by poison on March 18 at Upper Dominick Street, Dublin. The poison used was a solution of cyanide of potassium, which the husband prepared by dissolving 1 oz. of cyanide of potassium in $\frac{3}{4}$ pint of water, and used for cleaning gold lace. According to the medical evidence, the deceased had tubercular disease of the brain, which caused headache and conducted to irresponsibility.

Dispenser Appointed.

At the meeting of the South Dublin Union last week, Mr. Jessop was appointed dispenser to the South Earl Street Dispensary, at a salary of 135*l.* per annum and house. There were five candidates for the position, one of them being Mr. G. Madders, who has been for fourteen years dispenser at the South Dublin Workhouse. Two of the candi-

dates did not put in an appearance, and Mr. A. Farrington, another of the candidates, would not consent to give up his pharmacy if elected. The choice consequently lay between Mr. Madders and Mr. Jessop, and fell to the latter by a majority of thirty-five votes.

Personal.

Mr. James E. O'Neill, C.C., D.C., principal of the firm of O'Neill & Co., grocers and druggists, Maghera, has been appointed by the Londonderry County Council a member of the Managing Committee of the City of Derry Infirmary. Mr. O'Neill was already a Governor of the Derry Asylum, and holds other public offices.

Mr. Thomas W. Robinson, J.P., M.P.S.I., director of Messrs. Hayes, Conyngham & Robinson's pharmacy, Dublin, opened, on March 15, a new public library at Kingstown, and was presented with a golden key as a souvenir of the occasion. Sir Charles Cameron, Medical Officer of Health for Dublin, was also one of the speakers. Mr. Robinson is to present in person an address of welcome from the Kingstown Commissioners to her Majesty on the arrival of the latter in Ireland next month.

Contracts.

The Cork Medical and Drug Company and the Medical Requisite Company, Cork, were respectively declared contractors for drugs and surgical appliances for the Kinsale Union for the ensuing half-year.

On March 17, at the meeting of Killarney (co. Kerry) Board of Guardians, the tenders for the supply of medicines were considered. The following were the tenders:—Messrs. Thacker & Hoffe, Dublin, at an abatement of $7\frac{1}{2}$ per cent.; Leslie & Co., Dublin, 10 per cent. abatement; Cork Chemical Company, 5 per cent. abatement; Boileau & Boyd, Dublin, $7\frac{1}{2}$ per cent. abatement; and Clarke & Co., Dublin, $7\frac{1}{2}$ per cent. Messrs. Leslie & Co.'s (Dublin), being the lowest, was accepted. Tenders were also received for the supply of medical and surgical appliances for the same period from Messrs. Smith & Sheppard, Dublin, less 4 per cent.; Harman & Co., Dublin, less 5 per cent.; Medical Supply Association, Dublin, less 25 per cent.; Medical Requisite Company, Cork, less 10 per cent. The tender of the Medical Supply Association, Dublin, was accepted.

Contractors Stop Supplies.

At a meeting last week of the Croom Board of Guardians the Clerk reported that the medicine-contractors had refused to send any further supplies until their account was paid. They had put in an overcharge of 21*l.*, which was running on for two or three years previous to the present contract. He (the Clerk) had returned the account, asking why the overcharge had been included. Mr. Mulquen: Is there a percentage allowed on the medicines? The Clerk: Yes; 48 per cent. on medicines and 46 on surgical appliances. I am sending on a cheque for the amount, less the 21*l.* overcharged. Mr. Bourke (L.G.B. Inspector) said, as there was no stipulation in the present contract as to the payment of arrears, the remedy was to get the medicine-supply elsewhere at the contractors' expense, and in the meantime send on another requisition for a supply, and place the matter in the hands of a solicitor. The Guardians acted accordingly.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

The ex-President's Wife.

Mrs. Steyn, wife of the ex-President of the Orange Free State, is a granddaughter of the late Bailie William Paterson, wholesale chemist and druggist, Aberdeen. Her father (the Rev. Colin Fraser), minister of the Dutch Reformed Church at Philopolis, near Bloemfontein, is a native of Inverness, and made the acquaintance of his wife (Bailie Paterson's daughter) while a divinity-student at Marischal College, Aberdeen.

Doctors for the Front.

Dr. D. M. Greig, of Dundee, has been appointed to a surgeoncy at the front. His father, who was a well-known Dundee physician, saw active service in the Crimea, and his grandfather was the founder of the well-known pharmacy under "The Pillars," Dundee. Dr. Greig was for three years a surgeon in the Indian Medical Service.

Dr. J. M. Coates, son of Mr. Joseph Coates (Raimes, Clark & Co., wholesale druggists, Edinburgh), has volunteered for service in South Africa, and been accepted. Dr. Coates is an Edinburgh University graduate, and acted for some time in Craigleath Hospital, Edinburgh, but subsequently became senior house-surgeon in the Northern Hospital, Liverpool. He ranks as surgeon-Captain.

Surgeon-Captain Andrew Gilmour, M.B., of the Royal Army Medical Corps, who is under orders for South Africa, is the third son of Mr. William Gilmour, F.R.S.E., pharmaceutical chemist, Edinburgh, and graduated at the University there two years ago. Since then he has been a clinical assistant to Professor T. R. Fraser in the Royal Infirmary, and house-physician in the Royal Hospital for Sick Children. Although only 23 years of age, Dr. Andrew Gilmour knows the medical work of the Army well, having on several occasions, as a Volunteer, been called to Aldershot as an emergency officer.

Dispute between Trustees.

In the Court of Session on March 16, Lord Low disposed of an action raised by William Mills, chemical-manufacturer, Glasgow, one of the trustees of the late Robert Brown, of Shortroods, and tutor for his three children, against Isabella, a daughter of Robert Brown, and other trustees. Pursuer sought to have it declared *ultra vires* of the defenders to pay salary or commission to Robert Brown, one of their number, as manager of the works and business carried on by the trustees at Paisley, or to continue to do so while he held office as a trustee. Interdict also asked to have defenders repay 5,000*l.* thus paid to Robert Brown. Lord Low granted interdict, and, with regard to the money sued for, his Lordship ordered the trustees to lodge a statement of the sums received by Brown as salary and commission.

Edinburgh Pharmacy Athletic Club.

The annual general meeting of this club was held at York Place on March 13, Mr. Geo. Somerville (President) in the chair. The Secretary's report showed the club to be in a flourishing condition, and the Treasurer's financial statement was likewise satisfactory, a substantial balance being carried forward. The ninth annual athletic sports and football competition were intimated for Wednesday evening, May 23. The following officers were elected:—Hon. President, Mr. John Bowman; President, Mr. G. H. C. Rowland; Vice-President, Mr. A. R. Smith; Secretary, Mr. J. P. Gibb, 8 Cobden Crescent; Assistant-Secretary, Mr. J. Aikman; Treasurer, Mr. D. S. Napier; Committee, Messrs. C. R. Brown, L. S. Lamb, J. MacBain, J. L. MacIlwrick, A. G. Paterson, George Somerville, and W. C. Taylor. Votes of thanks were awarded to the retiring office-bearers, and also to the Pharmaceutical Society for the use of their house, and a guinea was voted to the Benevolent Fund.

French News.

(From our Paris Correspondent.)

MINERAL WATERS.—The French Minister of the Interior informed the Paris Academy of Medicine that, in future, all applications for the sale of mineral water in France, whether coming from Frenchmen or foreigners, must be accompanied by a certificate of the microbial state of the source from which the water is taken.

THE PARIS EXHIBITION will be formally inaugurated on Easter Sunday, April 15; there is every likelihood that this date will be strictly adhered to, though the exhibition can scarcely be in anything like a complete state for some weeks later. Judging from the aspect of the various buildings at the present time it seems practically impossible that they

can be anything like ready. As regards the British exhibits I am glad to hear that manufacturers are well forward with their preparations. I went over the section of "Chemical and allied industries," in which all exhibits connected with pharmacy, perfumery, &c. will be located, and found it near the further end from Paris of the machine gallery, familiar to visitors of the 1889 Exhibition. The spaces for exhibitors are all carefully marked out, and some exhibits have already arrived. The section is near the "Big wheel," and so can easily be located. It may be added that, owing to the arrangement of the exhibition, an effort has been made to classify all exhibits, instead of having a British section, American section, and so on, as on former occasions. The result is that English exhibits will be dispersed in something like fourteen different parts of the exhibition grounds, not including the colonial sections, which is by no means a distinct advantage.

THE PARIS SOCIETY OF PHARMACY'S meeting this month was of more than average interest. M. Planchon presided, and he showed a bottle of fruit known as ko-sam, which has been used by the Chinese from time immemorial in the treatment of dysentery. The fruit is obtained from the *Brucea sumatrana*, which grows in Indo-China and adjacent islands. Its therapeutic efficacy appears to have caused the fruit to be considered quite a specific for dysentery by Europeans. J. F. Eykmaun reported in 1887 that he had obtained an alkaloid from the drug which he called Brucamine. Dr. Mougeot, of Saigon, recommends 10 to 14 of the kernels of the fruit to be crushed, steeping breadcrumb in the essential oil, making into pills of which two are given each a day. M.M. Heckel and Schlagdenhauffen have also made a complete study of the ko-sam fruit, both from a botanical and chemical point of view. They think that their researches will result in showing that the medicinal properties of the fruit resemble those of quassia. A paper by M. Debray on iodide syrup, and M. Prunier's short abstract of M. Baudrian's thesis on the "Study of the Emetics" by which he recently won the diploma of doctor of pharmacy, followed. M. Leidié then read M. Guerbet's note on the composition of sandal wood oil. MM. Bourquelot and Voiry referred to several medicinal preparations for the new Codex. Before dissolving, the Society went into secret committee to select a member in place of M. Würtz, deceased.

"**M.A.P.**" AND CHEMISTS.—The paragraph reproduced in last week's *C. & D.* from the Paris letter of *M.I.P.* has certainly had the effect of interesting pharmacists in Paris, and producing smiles of contemptuous indifference. The item in itself forms, no doubt, a smart piece of reading for persons unacquainted with French pharmacy; but, as several of my friends point out, the writer has allowed his smartness to get the better of his veracity or knowledge—or both. The paternal solicitude for the ignorance of English chemists is almost humorous. There is not, however, the slightest doubt that Dr. Borne's prescription has had a great success, and in that alone is *M.A.P.* in contact with facts. More than this, it "galvanized," as a Frenchman expressed it, the scientific world here; but as to complications having arisen from its publication, that is what my friend Mr. Thomas Atkins would call a—distinct misunderstanding. Everyone knows—and there is no excuse for publishing a statement to the contrary—that it is an infringement of the law here for any pharmacist to dispense medicines except on a prescription signed by a doctor. One cannot pretend to say that the law is not infringed; but to say that "every chemist in Paris was deluged with orders" for Dr. Borne's mixture and cachets is simply an effect of the imagination, as "every chemist in Paris" can testify. That Dr. Borne's prescriptions were made up is a fact, but in quite a normal quantity. As to the medicos being up in arms—why they had need only to merely breathe a suggestion of the "pharmacy law" to make every pharmacist toe the line at the double. For the very same reason, the pharmacists themselves are naturally protected against "indignant influenza-smitten customers who threaten pharmacists with the terrors of the law" for refusing to supply medicine except with a proper prescription—the indignant gentlemen might just as well expend their fury by whistling in their coal-cellars, for the only benefit they would get by summoning a pharmacist on the plea suggested would probably be an action for malicious prosecution.

Colonial and Foreign News.

IODINE-MANUFACTURE IN JAVA.—An application has been made to the Netherlands Indian Government by a Mr. K. Ellinger for a concession for the manufacture of iodine-compounds from saline springs near Sourabaya, Java. In accordance with the law, however, no such concession is required, so that the manufacture will commence at an early date.

PROPOSED UNIFORM TARIFF.—The Montreal Board of Trade has adopted a series of resolutions for submission to the London Congress of the Chambers of Commerce, to be held shortly, one of which proposes the imposition of a moderate special *ad valorem* duty on importations from foreign countries to be levied uniformly in all parts of the British Empire.

CHARLES A. VOGELER BANKRUPTCY.—Two co-trustees have been appointed in Baltimore to act with Mr. Dulaney as temporary receivers in this estate. The new co-trustees are Mr. L. B. Kemp, President of the Commercial and Farmers' National Bank, and Mr. J. B. Ramsay, President of the National Mechanics' Bank of Baltimore. These gentlemen have given \$300,000 security in each case.

AN EMBARRASSING POSITION.—Some time ago Mr. Arnott Housekeeper, a druggist in Marbeth, Pennsylvania, signed his name to some papers to oblige a friend. Later he discovered that he had signed bonds for a real-estate company engaged in a huge boom speculation. The company failed, and its creditors claim \$2,891,093 from Mr. Housekeeper. As the druggist's total assets are stated to be only \$25, he has decided to declare himself bankrupt.

TO EVADE CONSCRIPTION.—A trial at Elberfeld, according to the Berlin correspondent of one of the London morning newspapers, is at present exciting considerable interest throughout Germany. Nearly forty persons are charged with various misdemeanours under the Recruiting Laws. The principal offender, Otto Struckberg, has died in prison, and he sought out wealthy young men liable to conscription and supplied them, at a honorarium varying from 100*l.* to 200*l.*, with medicine to unfit them temporarily for military service. Dr. Ziël, and a chemist named Eves, both from Cologne, prescribed and compounded the necessary pills, which affected the hearts and livers of those who took them.

PORTUGUESE TRADE GOOD.—A belated consular report on the trade of Portugal for 1897 and 1898, issued from the Foreign Office this week, says that chemical-products were imported to the value of 811 contos (115,000*l.*) in 1898, against 541 contos (76,000*l.*) in 1897. Among the principal of these were caustic soda, 38 contos (12,500*l.*) in 1898, against 67 contos (9,000*l.*) in 1897; carbonate of soda, 52 contos (7,000*l.*), against (6,000*l.*) in 1897. The principal sources of supply for these chemicals were the United Kingdom and France. Sulphate of copper was imported to the value of 197 contos (27,000*l.*), against 41 contos (5,800*l.*) in 1897. France supplies practically all the medicines—7,250*l.*, against 6,000*l.* The chemical-products exported amounted to 42,000*l.* in 1898, against 41,000*l.* in the previous year. Medicines and drugs were exported to the value of 4,000*l.*, or rather less than in 1897. Of soap 620 tons (6,500*l.*) were exported, against 570 tons (5,400*l.*) in the previous year, the whole supply being sent to Portuguese colonies, and in particular to Angola, Mozambique, and St. Thomas. The general trade of Portugal was extremely good during 1897-98.

CHEMICAL IMPORTS INTO TURKEY.—The Sultan has confirmed the decision of the Imperial Government for suppressing the tax of 2 paras levied on every label affixed at the Custom-houses on chemical products imported from abroad, but has commanded that, in the interests of public health, the Customs authorities should continue to apply the labels. The Ministry for Foreign Affairs has communicated the Sovereign's decision to the Foreign Missions, informing them at the same time that the analysis of chemicals will henceforth be made at the Custom-houses, to each of which a competent analyst and a laboratory provided with the latest appliances will be attached.

Australasian News.

From "The Chemist and Druggist of Australasia,"
February 1, 1900; 6d. per copy, post free.

AS IN TASMANIA.—The President of the Pharmacy Board of Tasmania celebrated the annual meeting that occurred in his year of office by inviting all members of the Society and representatives of the medical and other authorities to dinner. The dinner was preceded by a drive through some of the most picturesque scenery in Australia. This was a highly popular procedure, and brought together the largest attendance on record.

FOR THE FRONT.—The departure of the Australian contingent to South Africa has filled a large place in the thoughts of the whole community. Felton, Grinwade & Co., of Melbourne, and Elliott Brothers (Limited), of Sydney, have both made handsome contributions of medicines, bandages, instruments, and other appliances needed for the medical service of the contingents, the values running close up to 1,000*l.* in each case.

PERSONAL.—The new President of the Pharmacy Board of Queensland, Mr. A. S. Denham, was at one time with Messrs. Southall Brothers & Barclay (Limited) of Birmingham. The rule in Queensland is that the office of President shall be held for one year only, so that most of the members of the Board and of the Council of the Society have already passed the chair, and are, therefore, intimately acquainted with the work of the government of pharmacy.

THE BUBONIC PLAGUE is said to have made its appearance in Adelaide and in Sydney. A deserter from a ship sailing between New York and Adelaide was found some weeks ago suffering from a disease which was diagnosed as suspiciously like the plague. In the same town a lad of 12 was found to have similar suspicious symptoms. They were promptly isolated, and shortly afterwards a wharf-labourer in Sydney, also suspected of suffering from this disease, was promptly isolated, his whole family being compelled to accompany him into quarantine. The doctors are at loggerheads on the subject, many declaring that the disease is not plague.

SUNDAY TRADING.—A Bill has been introduced into the New South Wales Parliament consolidating and amending the Acts relating to Sunday trading. These go back to 1604, five of them having been passed between that date and 1676. The part that affects pharmacists is that, notwithstanding anything in this or any other statute to the contrary, the act of any druggist dispensing medicine shall not be, or be deemed to be, any infringement of the law." As pointed out in *The Chemist and Druggist of Australasia*, this would compel the chemist to prove that everything that went out of his shop-door on a Sunday was a medicine that had been actually dispensed.

VISITORS.—Several visitors from London have been lately, or still are, in the colonies. Mr. S. Wylie, representing Vi-Cocoa (Limited), reports very satisfactory business. W. Langton & Co., late of Langton, Edden, Hicks & Clarke, of London, have opened a branch of their business at 254 George Street, Sydney, under the supervision of Mr. Langton. Mr. A. E. Potts, of Potts, Rowley & Co., London, agents for Owbridge's lung-tonic and William Hay's soluble essences, has been visiting Sydney and Melbourne. Mr. T. Edwards Lescher, of Evans, Lescher & Webb, is now visiting the colonies, accompanied by Mr. M. M. Irving, the firm's Australasian representative.

RESEARCH-WORK.—The Pharmaceutical Society of Tasmania suggested to Dr. Attfield that possibly systematic investigations might be made at the research-laboratories at Galen Place with plants and drugs sent from the colonies. Dr. Attfield, in replying, said the matter was a very important one. He advised "the testing by one or more local medical men having recognised qualifications, and that only those drugs which offered some fair indications of usefulness be sent home for research. If such drugs in commensurate quantities with the preliminary evidence of their therapeutic value were laid before the Pharmacopeia Committee of the Medical Council, men of skill adequate for the proper investigation of the drugs could doubtless be found." A commencement has been made with the native hop-plant, the te-tree, and some species of fern.

New York Notes.

(By the Man from London.)

A NEW YORK SIDE-LINE.—The water supplied to the free citizens of New York has of late been muddier than usual, and druggists have been selling enormous quantities of "pure water." There are several brands, the price varying from 75c. to \$1 $\frac{1}{2}$ for 5 gals.

RESTRICTED AND UNPROFITABLE.—Some of the east-side New York city retail druggists undertook to augment their receipts last month by selling valentines, but in most instances it was found that the inconsequential demand afforded a scant margin for profit.

ENGLISH PHARMACISTS occasionally get American prescriptions to dispense, which, although familiar preparations here, are difficult to fill without the necessary text-books. For instance, a prescription calling for "Dobell's solution" would as completely baffle the average English chemist [if it were not for the *C. & D.*—ED.] as a request for syrup of fox's lungs or oil of swallow and oil of spike would puzzle his New York *confrère*.

DEPARTMENT STORE DRUGS.—By a vote of 65 to 40 the Assembly on February 12 advanced to third reading the Gale Bill, prohibiting the sale of drugs in department stores in New York City. Mr. Green, of New York, attacked the Bill, declaring it to be entirely radical, and that under its provisions a department store could not even sell packages of cough-drops. Mr. Gale replied that his Bill was introduced to protect public health, as the drugs dispensed in department stores in New York City were sold by boys. The measure is too drastic as things are at present; besides, the public buys very few drugs in department stores—it is patent medicines they deal in chiefly.

SEASONABLE SPECIFICS.—At this time of the year whooping-cough is more or less prevalent, and the following New York hospital formulae may be useful to some *C. & D.* readers:—

Whooping-cough Mixture.

(Infants' Hospital, N.Y.)

Antipyrin	...	...	...	...	5ij.
Extract liquorice, fluid	...	...	...	...	5ij.
Syrup ...	...	...	...	...	3iv.
Water to	...	...	...	...	8vij.

5j. t.i.d. for children from 3 to 7 years of age.

Mist. Pertussi.

(Bellevue Hospital, N.Y.)

Sodium bromide	...	...	...	gr. 90
Citrate of iron and quinine	...	...	...	gr. 90
Syrup of senega	...	...	...	3j.
Syrup of wild cherry	...	...	...	5j.
Syrup of acacia to	...	...	...	5ij.

M.

5j. for child 4 years old.

DEATHS.—Dr. Lesley E. Keeley, whose gold cure for the liquor-habit gave him a world-wide reputation, died suddenly at his home in Los Angeles, California, on February 21, from heart-disease. He was 68 years old, and a believer in the Christian science treatment of disease. Keeley's gold cure brought its discoverer about 20,000*l.* a year, and his personal fortune is estimated at two million dollars.—Alexander Hudnut, who died recently at Brighton, England, was a noted New York pharmacist who for nearly twenty-five years was owner of a famous down-town pharmacy, the main feature of which was its soda-fountain, where thirsty brokers and Wall Street men absorbed cooling drinks. Mr. Hudnut sold his business in 1890, it is said, for \$250,000, and lived afterwards in Europe. The purchaser retained the pharmacy for a short time and then transferred it to Messrs. F. F. Anness and G. H. Bancroft, who turned the concern into a corporation. In 1899 the company went into the hands of the receivers, with liabilities amounting to \$34,000.

REASSURING.—Husband: "My darling, when I am gone, how will you ever be able to pay the doctor's bill?" Wife: "Don't worry about that, dear. If the worst comes to the worst I will marry the doctor."

Pharmaceutical Society of Ireland.

EVENING MEETING.

AT the evening meeting on March 12, Dr. J. C. McWalter was announced to read a paper on

THE DIALYSIS OF DRUGS.

He was, however, called out on an urgent case and arrived just after the President and members of the Council and Society had left, after waiting till 8.45 P.M. The following is an abstract of the paper which Dr. McWalter had prepared for the occasion:—

In the index of the British Pharmacopœia the word "dialysis" is no longer to be found. For some reason the liquor ferri dialysatus has been deleted and the student of the volume must no longer be assumed to be familiar with dialysis. This fact serves as an apology for entering into the details of the process. When two liquids of differing density are separated by a thin porous partition, either organic or inorganic, a current sets in from one liquid to the other—these currents being called endosmose and exosmose respectively. To the general process the term diosmose is applied, and the apparatus used for the process is called an endosmometer. In general the endosmose takes place towards the denser liquid, but alcohol and ether are exceptions, and when they are placed in a membranous vessel floating in water, the flow is towards them. For the production of endosmose it is necessary (1) that the liquids be different but capable of mixing, (2) that the liquids be of different densities, and (3) that the membrane be favourable to at least one of the substances. Endosmosis plays a prominent part in the motion of fluids in animals and vegetables. Evaporation from the skin of animals brings about a motion from the interior towards the skin and in like manner the passage of water to the rootlets of plants is produced by evaporation from branches, leaves, flowers, and fruit. The endosmotic equivalent of a body is that number which expresses how many parts by weight of water will pass through a membrane for 1 part by weight of the substance. The endosmotic equivalent of alcohol is 42, that is 42 parts of water pass through the membrane for 1 part of alcohol which passes out. The equivalent increases with the temperature, and the quantities of substances which pass in equal times through a membrane are proportionate to the strengths of the solutions. Those substances which pass with great difficulty through parchment membranes are called colloids, and the chief pharmaceutical interest in dialysis lies in the power which it gives of separating colloidal constituents from more diffusible salts. In testing the contents of a stomach for arsenic it is placed in a dialyser and floated in water when the arsenic passes out in a form in which it can be readily identified. Sometimes a chemist is asked to test an albuminous fluid like pea-soup for strichnine, when he will find that dialysis is the quickest method of separating the alkaloid. The galenical processes of the Pharmacopœia at present attempt to exhibit in fluid form the entire principles of a drug, in so far as those may be yielded to water as in infusions, or to alcohol as in tinctures. The difficulty is that boiling water extracts also a number of inert constituents from the drug which often render the preparation unsightly and unpalatable, as well as incompatible with more active ingredients. Those inert constituents of roots and barks are of a fibrous, starchy, mucilaginous, albuminoid, or resinous nature, and

THE PROBLEM FOR THE PHARMACIST

is to discover a process whereby the active principles of a drug can be exhibited without the inert adjuncts. Generally speaking, the bulk of a root is composed of fibrous tissues, and contain various extractive matters, certain salts, colouring matters, albuminous starches, mucilaginous matters, and, perhaps, resinoid, glucosoidal, and volatile principles. With boiling water much of the active principles are obtained in solution, but in the form of tannates and combined with the bulk of albuminoid, starchy, and mucilaginous constituents, which deposit when the solution cools and from the quantity of albuminoids present tend to decompose it. Continuous cold percolation is probably the best all-round

method, but mucilaginous, albuminoid, and glucosoidal constituents are all liable to be dissolved by this process, although to a lesser extent than with boiling water, and a method is desired which shall avoid this. Dialysis seems to be the most promising of success, but the results have been by no means brilliant, and the most that can be said is that it is worthy of further investigation. About a year ago he (the essayist) tried making dialysed solutions of cinchona-bark, by placing powdered bark in a glass jar fitted with a parchment bottom and floated on water. The resulting solution after a couple of days was a light-coloured fluid, having a rather faint taste of quinine. The product from calumba-root treated in like manner was painfully suggestive of an ill-made infusion. The failure was perhaps due to the root not having been dialysed for sufficient time, as the preparation of dialysed solutions requires days and not merely hours. The solution of calumba thus made seems to be

BETTER THAN THE ORDINARY INFUSION,

and to remain unaltered with salts of iron for a longer period. The absence of mucilage and traces of glucose would account for this latter property, but on the other hand although no elaborate apparatus is required, the process is tedious. A special advantage in dialysis is that it elaborates and extracts the essential principle of a drug unaccompanied by the extraneous substances common to all drugs of the same class. Drugs whose therapeutical use depends on the presence of an essential oil do not seem adapted for treatment by dialysis, as the oils scarcely permeate the membrane unless dissolved in the water, but a notable exception to this is cascarailla, which Squire says contains from $\frac{1}{2}$ to 2 per cent. of an aromatic oil. Liquor cascariellæ dialysatus, made by subjecting the bark to dialysis, is more aromatic than the infusion, does not blacken with salts of iron, and keeps well. In liquor rhei dialysatus the stomachic properties of the root seem to be developed rather than the astringent. He had anticipated that cinchona-bark would be peculiarly suitable for treatment by dialysis, but the result has been disappointing. The preparation is less astringent than the ordinary infusion, but seems to have a smaller percentage of total alkaloids. Perhaps if a little hydrochloric acid had been added, the result would have been better. Liquor gentianæ dialysatus may be considered as a success. The active principle gentioperin appears to dialyse without much glucose or extractive, and hence the liquor might be used as a pure bitter even without aromatics.

It should not be supposed that the dialysis of drugs is a mere fanciful fad. Certain Italian pharmacists have carefully studied the matter, and have come to the conclusion that for many drugs dialysis yields the most satisfactory results. No pretence is made in this paper to any great accuracy, either in statement or experiment. The subject seems to him to be a fruitful one for pharmaceutical investigation and a proper one for pharmaceutical discussion.

American Notes.

SOAP TO PAY WAR-TAX.—Chicago soapmakers are greatly troubled over a ruling made by the authorities, holding them to be liable for internal revenue tax under the head of medicines, because of advertising expressions. Those which may have to pay back war-taxes are Bullock, Ward & Co., Great Northern Soapworks, Oak Park, Dawson Soap Company, and the Medicated Soap Company. These concerns have united to fight the ruling.

CYANIDE OF POTASH DUTY DOUBLED.—American importers of cyanide of potash and cyanide of soda are paying the 25 per cent. *ad val.* duty levied by the Customs officials on these products under protest, in hope that the Treasury Department will reverse the ruling of the Custom-house and refund a part of the money. Hitherto cyanide of potash has paid a specified duty of $12\frac{1}{2}$ per cent. But pure cyanide is expensive, and a large part (some 70 per cent.) of the cyanide imported is a mixture of cyanide of potash and cyanide of soda. Recently the appraisers made a ruling that this mixture is a chemical compound, and doubled the duty from $12\frac{1}{2}$ per cent. to 25 per cent. *ad valorem.*

War Notes.

TRANSVAAL AND O.F.S. SUBSCRIBERS.—Any subscribers of THE CHEMIST AND DRUGGIST whose places of business were in the Transvaal and Orange Free State, and who have not received their copies since the war broke out, are requested to send their names and addresses to the Publisher, 42 Cannon Street, London, E.C. We have reserved their copies of THE CHEMIST AND DRUGGIST and copies of the DIARY, and these we shall send to them as soon as they inform us of their addresses. This note also applies to subscribers in beleaguered towns in other parts of South Africa whose supply of THE CHEMIST AND DRUGGIST has been stopped by the Post Office owing to the war.

CHEMISTS IN THE FREE STATE.—We stopped the supply of THE CHEMIST AND DRUGGIST to our subscribers in the Orange Free State at the beginning of November, but we resumed the supply with the issue of March 17, and this week we have forwarded all the back numbers from November 1, 1899, to March 10, 1900, including the Winter Issue and THE CHEMISTS' AND DRUGGISTS' DIARY for 1900, to those whose names are still on our books as subscribers. We hope that these will be duly delivered, but if any subscribers do not receive them before April 18 we should be glad if they would write to us.

A DOCTOR'S EXPERIENCE IN O.F.S.

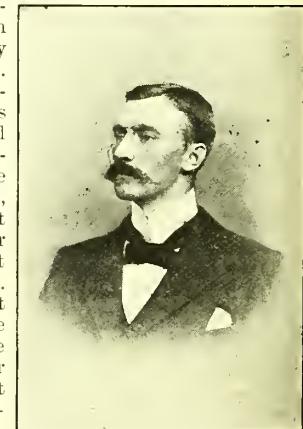
The surrender of Bloemfontein, and the practical annexation of the Orange Free State, give special interest to the subjoined. Dr. Thomas Greenwood Hall is an M.B., C.M. of the University of Durham. He belongs to Grantham.—EDITOR.

Our correspondent at Cape Town, writing by the mail which left on February 28, gives the following particulars of a chat that he had with Dr. Greenwood Hall, of Jacobsdal, Orange Free State, who up till quite recently was attached to the Government (Free State) Hospital there, where he rendered excellent services to the wounded.

Before removing to Jacobsdal, a short while ago, the doctor resided at Koffyfontein, O.F.S., for which district he held the position of district surgeon. He was also interested in a drug-store in Koffyfontein, managed by his brother, Mr. Arnold Hall.

Questioned by our representative as to the Boers and their hospitals, Dr. Hall volunteered what information he could give about the hospitals. As to the Boers, the doctor remarked, "It would be hardly fitting for me to say much about them, especially politically. Hitherto, during my short stay in Cape Town, I have absolutely refused to be interviewed by reporters for that very reason. I don't want to mix up in politics—just now, at any rate."

On receiving the assurance that the conversation would not turn in that direction, the doctor said, "Dr. Ramsbottom, the P.M.O. attached to the Free State forces, crossed westward to Jacobsdal early in the fray to organise a hospital. My brother sold as much of the stock at the drugstore as possible, and cleared to Cape Town. After the war was declared a commando came our way, commandeering as they went along, chiefly meal. I handed over about 25*l.* worth. I then joined the hospital force as senior surgeon, and remained in charge until the German Red Cross Society arrived, when I took charge of the typhoid section. Mr. Lewis (of Kroonstad, O.F.S.), a British chemist, acted as dispenser, but the Germans relieved him of his duties. Mr.



DR. GREENWOOD HALL.

Bryant, manager of Messrs. Lennon (Limited), Bloemfontein, joined us at the hospital, remaining some time. When he left the Free State capital he had with him an old x-ray apparatus, but, unfortunately, the batteries got smashed in transit, so it was of little use. Mr. Bryant is probably with the commando in the south."

Asked if the hospital was well fitted up, Dr. Hall replied, "Since the Germans arrived everything for use is there—excepting soda-water and a good supply of milk—a 'Sparklet' bottle, for instance, would have been most useful, and this was particularly hard on my patients. From time to time I had several British wounded under my charge, but as soon as they were fit to travel they were taken on to the central hospital at Bloemfontein." In talking of the British wounded, the doctor casually mentioned that the young Dutch girls, who had joined for nursing-purposes, paid a little too much attention to the cases when they happened to be British. From a Boer point of view this was not quite the thing, and Boers grumbled in consequence—good-humouredly, of course.

"They knew a good thing when they saw it," suggested the C. & D. man.

"There may be something in that," came the reply, with a smile. "The Germans brought with them a splendid x-ray apparatus, with a small oil-engine to work it, and the hospital itself is lit throughout by electricity. After the battle of Magersfontein our hospital sent out all the conveyances and men to bring in the wounded; I, with three nurses and three attendants, being left at the hospital. You can judge just how I felt when I heard that the British had taken every man-jack prisoners. Before anything could be done they were all well on their way to Cape Town. The British kept them at Cape Town for six hours, then started them off back; but ten days elapsed before I saw my staff again. Meanwhile we got to work, some of us doing very long shifts—in one instance I was at it for forty-five hours—and so we worked on till help came. The Free Staters have another hospital on the western border, located at Boshof, in the vicinity of the commando surrounding Kimberley."

"Most of the hospital supplies used came from the Transvaal when we first opened, and until the foreign Red Cross appliances began to come in. At all times we were fairly well supplied in this direction."

"Jacobdal and its inhabitants were taken by complete surprise when the British entered. We saw the dust-cloud in the distance, but thought it was a Boer commando going Kimberley way."

Continuing, Dr. Hall explained that he was placed under escort by Lord Roberts when it was known that he wanted to leave, but he preferred duty to such a monotonous mode of travel over hundreds of miles of country, so he acted as medical officer to a convoy of British wounded bound for Modder River, from which place he travelled by rail to Cape Town.

Dr. Hall says he had many peculiar experiences during his stay in the enemy's country, and perhaps is not altogether sorry that he remained. He is, however, firmly convinced that he will never again remain in territories with whose rulers her Majesty is at war.

R.A.M.C. HOSPITAL-SERVICE IN NATAL.—The base hospital at Maritzburg is divided into three sections—(1) Station Hospital, Fort Napier, which now also includes the garrison church (forty beds) and a number of bungalows formerly used as barrack-rooms—in all 700 beds; (2) the "College Hospital"—Maritzburg College and a large number of marquees in the grounds—accommodating about 200 patients; and (3) the "Legislative Assembly," nearly 100 beds, used solely for Natal Volunteers. As compounders, two sergeants R.A.M.C. are employed at Fort Napier, a civilian at the College, and a Natal Carabineer at the Legislative Assembly. On the two hospital-trains at present running between the front and base all the compounders are sergeants in the R.A.M.C. A third hospital-train will shortly be running. Very compact little dispensaries are on each train. The base hospital has overflow ships at Durban, holding about 300 patients in each—viz., ss. *Maine*, *Nubia*, *Lismore Castle*, *Avoca*, and the *Spartan*—running to and from Cape Town with sick and wounded for Wynberg General Hospital. On the lines of communication are a general hospital at Mooi River and a stationary hospital at Frere.

ANOTHER VOLUNTEER DISPENSER.—Mr. W. Geldart, of Messrs. Days' Drug-stores, Wellington Street, Woolwich, has volunteered for the front as dispenser, and been accepted. His numerous friends at Woolwich united to give him a send-off, and, as a memento of the occasion, he was presented with a handsome cigarette-case, with good wishes for his success and a safe return. Mr. Geldart was a prominent member of the Woolwich Thursday Football Club. He is a son of Mr. J. Geldart, chemist and druggist, of 163 Oakfield Road, Liverpool.

MESSRS. DAY'S SOUTHERN DRUG COMPANY (LIMITED), have, during the past week, sent a third contribution to the Lord Mayor's Widows and Orphans Fund at the Mansion House. The first amount collected by the firm was 25*l.*, the second 44*l.* 13*s.*, and these, together with the current week's contribution of 20*l.* 12*s.*, make a grand total of 90*l.* 5*s.*, by which amount the fund is richer owing to the energetic sympathy of Messrs. Day and their employés. The firm are continuing the collection.

OUR PHARMACEUTICAL CORRESPONDENT in the mounted section of the C.I.V., writing from Cape Town, deals chiefly with the camp routine. We give a few details of his experiences at Green Point Camp, Cape Town:

Our daily routine so far has been more or less as follows:—Réveille, 5 A.M.; at 5.35 cocoa is served, at 6 A.M. we repair to the horse-lines and clean, water, and feed the horses. At 8 A.M. we breakfast. This consists of coffee and bread, and each tent clubs together and gets butter or jam out of their pay, the Government only supplying bread and black tea or coffee. We parade about 9 A.M., generally mounted, and get back to the lines about 11.30. At 12 we water and feed horses again, and then we have our own dinner, consisting of boiled meat and potatoes and bread. We parade from 2 to 4.30 and then have tea and what bread is left from the morning rations, and at 6 P.M. we water and feed the horses again. We are then free, unless we have guard or other duty to perform during the night, and can go into Cape Town till 9.30 P.M. (last post).

The mounted section of the C.I.V.'s are now with Lord Roberts, and our correspondent describes their arrival at Enslin on February 16 to take part in the flanking movement which led to the relief of Kimberley.

During the day every man was served out with emergency-ration, consisting of a few pounds of biscuits and a small tin containing in one half a meat-and-vegetable compound, and in the other a very good kind of powdered chocolate. There was very little sleep that night for anyone, as we all slept in our kit. At 3 A.M. the order was given to saddle-up, and at 4 A.M. in the darkness the detachment, 250 strong, filed out. The air was filled with the hoarse cries of command and the ear-splitting shrieks of the teamsters urging on their lengthy teams of mules or oxen. I must write you later of the fortunes of the detachment, as I had the bad luck to be posted for guard over the camp with fifteen or sixteen others. We hope, however, to advance with the stores in a few days. This morning ten or twelve of our men were brought down in a Red-Cross waggon, having been overcome by their three days on the emergency-ration, with only the addition of a little extra biscuit given out en route. They have gone down to Orange River to recuperate.

FROM ORANGE RIVER CAMP.—A Volunteer in the R.A.M.C. at Orange River sends some interesting particulars to the *Aberdeen Free Press*, from which we take the following:

Our hospital is fitted for one hundred patients, but often we have two hundred in it. It consists of two marquees and about forty tents, and each orderly is in charge of seven or eight patients, sick or wounded. We are kept pretty busy all day, and have not much time on our hands. If there is nothing to do in the tents, there is always some outside work to do. The bugle goes at 5, and np we have to get and clean our tents before 6, when we parade. Then off to our patients' tents before 6 to make their beds, wash them, and make everything tidy before breakfast. Breakfast at 8, and parade at 8.30, and back to the patients to take temperatures and so on before the medical officer comes round. He comes round at 10 o'clock, and woe betide us if he spots anything out of its place or dirty! He writes the treatment for the day, and we have to get the medicines and any extras, such as sodas, brandy, and ice. The rest of the day is spent in generally attending to the wants of the patients, not forgetting other two parades at 2 o'clock and 6, when we get out on pass to 8.30, if not on night duty, which occurs about once every three nights. For this three orderlies are put on, and do two hours on and four off, the first starting from 6 to 8. The duty consists in walking round the camp and attending to the wants of any of the special cases—a pretty sickening job at times. All our cases at present consist of enterics and sick, but for the last week we have

been sending down as many as possible to Wynberg to make room for wounded, as a big battle is expected daily. I shall be glad when we get some wounded, as I should like a little experience in surgical cases. On the whole we have a pretty nice time, except when we are knocked up in the middle of the night to patients, or do any fatigued work.

The writer was apprenticed with Bailie Seivwright, chemist and druggist, of Cullen, to whom his letter is addressed.

SERGEANT LEGGE, R.A.M.C., the dispenser on the Princess of Wales's hospital-ship, was born at Ilkley, Yorkshire, and received his education in London. He was articled with Mr. O. Corder, pharmaceutical chemist, Norwich, and served his time with this gentleman. While junior-assistant chemist in Nottingham he passed the Minor examination, and was the successful applicant for the post of dispenser at the Nottingham Union. He is a member of the St. John's Ambulance Corps, and is attached to the A Company of the Robin Hood Rifles. When the *Princess of Wales* hospital ship was chartered he was selected as the dispenser, and has charge of the operating-theatre. It speaks well for the Medical Staff Corps of the vessel

that when it arrived at Southampton the invalids with one exception were able to walk ashore. Sergeant Legge's position as dispenser is being kept open by the Nottingham Board of Guardians.

TABLOIDS TO THE FRONT.—A correspondent of the *Birmingham Daily Post* appears to have consummate faith in tabloid medication. Writing to the *Post* he says:—

My servant having a son at the front I ordered to be sent to him some thirst-tablets, 10-minim-strong tincture-of-ginger tabloids for cold nights, compressed-tea tabloids, also some saccharin-tablets to sweeten them all instead of sugar; and, having read beer also had been compressed, if they had them they were to send them also; but the latter were not obtainable, so they sent a "forced-march tabloid" instead. He has written me from Modder River thanking me for them, saying "they have come extremely useful when we are on outpost-duty; they are about the most useful things a soldier can have."

Personalities.

AT one of the Metropolitan hospitals last week a Mrs. Kruger and a Mrs. Roberts came up together for medicine.

MR. GEORGE RANKIN, the Transvaal chemist whose portrait was given in our March 10 issue, is a native of Edinburgh, not Forfarshire as there stated.

ACCORDING to the *Financial Times*, a certain A. M. Sequah, describing himself "as the youngest member of that famous family of medicine-men," is circulating handbills in the country offering advice on all diseases free of charge.

MR. R. A. ROBINSON, L.C.C., chemist and druggist, addressed the Kensington Ratepayers' Association on March 21 on "The London Government Act, 1899, and the Duties of Mayor, Aldermen, and Councillors of the new Boroughs."

MR. GODDARD CLARKE (Potter & Clarke, Artillery Lane, E.) has been elected Chairman of the Building Act Committee of the London County Council. Mr. Clarke is also a member of the Asylums, Parks and Open Spaces, Public Control, and General Purposes Committees, and of the Joint Committee of Members of the Council and Magistrates.



SERGEANT LEGGE.

MESSRS. G. B. KENT & SONS, 75 Farringdon Road, E.C., closed their premises at 12 noon on St. Patrick's Day, "in honour of the Irish soldiers of the Queen."

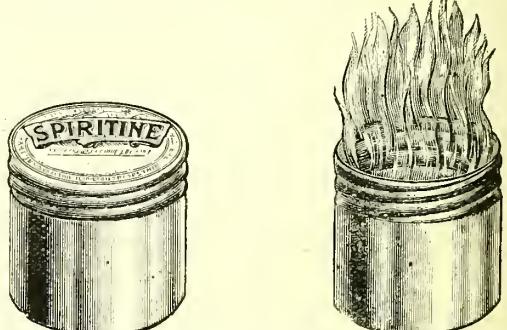
MESSRS. DE DIETRICH & Co., of Niederbronn, Alsace, makers of enamelled acid-proof chemical-apparatus, have appointed Messrs. B. A. Smith & Co., 36 Crutched Friars, E.C., sole agents for the colonies and the United Kingdom.

TABLOID-PHOTOGRAPHY.—Of the convenience of "tabloid" chemicals in photographic operations we are reminded by the receipt of the new edition of Messrs. Burroughs, Wellcome & Co.'s pamphlet, entitled "Practical Points Concerning Tabloid Photographic Chemicals." The whole of the chemical operations in photography after exposure can be conducted by "tabloid" chemicals in the manner clearly set forth in the circular. Photographic chemists should obtain a supply of the pamphlets.

"THE PHOTOGRAPHIC DEALERS' ANNUAL" (1s.) has just been brought out by Messrs. Marshall & Brookes, Harp Alley, Farringdon Street, E.C. The object of the Annual is stated to be to form a complete guide to photographic dealing, which it does very well. The information given is of a kind useful for reference by both dealers and their assistants, containing, as it does, the formulæ of the various developers recommended by manufacturers, lists of photographic societies, and a directory of trade-addresses.

OTTO OF ORRIS.—In the development of what may be called violet-perfumery, the new otto of orris which Messrs. Horner & Sons, Mitre Square, E.C., have recently placed upon the market is likely to play—indeed, is playing—an important part. The concrete oil of orris has always been a backbone to violet-perfumes, and ionone (its synthetic representative) has affected it but little, on account of the fact that a natural perfume is needed to go along with the artificial in order to give mellowness and permanency to the perfume. The concrete oil is not free from objection; it is by no means constant, but varies greatly in strength. Messrs. Horner's liquid oil (which they call "otto") is ten times stronger than a good concrete oil of orris, and represents the whole of the odorous constituents of orris-root. The otto has already been used by perfumers and soap-makers, who find it satisfactory, and is put on the market in two forms—viz., the otto *per se*, and a dilute form of it, each ounce of which is equal to an ounce of concrete oil of orris.

SOLIDIFIED SPIRIT.—We mentioned in THE CHEMIST AND DRUGGIST some time ago that spirit had been successfully solidified, so that its transport and use were rendered



safer and more convenient. Messrs. Barclay & Sons (Limited), 95 Farringdon Street, E.C., have now accepted the wholesale agency of "spiriteine," the name by which the product is to be known. The illustration shows the style of the package and method of using "spiriteine."

ACCORDING to a paper on mycorrhizas of orchids in the January number of the *Journal of the New York Botanic Garden* the roots and underground organs of more than seven hundred species have been found to be infested by symbiotic fungi.

Legal Reports.

High Court Cases.

ACETYLENE PATENTS.

IN the Chancery Division on March 17, Mr. Justice Cozens-Hardy granted the Acetylene Illuminating Company (Limited) an injunction to restrain an infringement by the Birmingham Carbide Company of four patents owned by the plaintiffs relating to the use of calcium carbide.

VIMBOS (LIMITED) PROMOTION.

THE case of Dudman *v.* Altman and others was heard in the Queen's Bench Division on March 21, before Lord Russell and a special jury. The plaintiff sues for damages for loss sustained by him by reason of untrue statements contained in the prospectus of Vimbos (Limited), on the faith of which he subscribed for 300 ordinary and 200 preference shares in that company. Mr. Duke, Q.C., for the plaintiff, said the prospectus stated that the Scottish Fluid Beef Company "was formed in Edinburgh in 1894, for the purpose of proving the commercial value of Vimbos, manufacturing the article, and introducing it to the public. The results have fully borne out the expectations which were formed of the lucrative character of the business." It was represented by the directors that the trading return would be sufficient to pay a very handsome dividend, whereas, at that time the company was insolvent, and the statement in the prospectus was untrue. It was further stated that contracts had been entered into in respect to the rights of manufacturing Vimbos both in France and Belgium, for which money would become payable in the following March, which would be "more than sufficient for a whole year's dividend on the preferred shares, and 10 per cent. for a year on the whole ordinary capital." He would be able to show that at the time the prospectus was issued no such contract had been concluded.

Mr. J. Pollard, liquidator of the Scottish Fluid Beef Company, in evidence, said the results of the trading of that company showed the Vimbos could have shown a profit of 90 per cent.

His Lordship: And, having established that, you were willing to sell for 5,200 shares in the new company?

The further hearing was adjourned to Monday, March 26.

CASSIE *v.* HORN.

THIS case came on for hearing in the Court of Chancery on March 27, before Mr. Justice Kekewich. Mr. Warrington, Q.C., explained that the plaintiff sought to restrain the defendant by injunction from selling certain preparations for diseases of the hair, skin, and scalp, contrary to an agreement dated December 18, 1893. The defendant was a specialist in diseases of the hair, skin, and scalp. Prior to the execution of the deed he carried on the business of advising persons who came to consult him in reference to such diseases, and also sold certain preparations which he had invented. He was desirous of giving up selling these preparations and of confining himself to prescribing. By the deed of December, 1893, he sold to the plaintiff, for 3,600*l.*, the goodwill of the business connected with the sale of these preparations, the preparations themselves, and certain trade-marks he had registered. By that deed he covenanted that he would not sell at any time thereafter any preparations in connection with diseases of the hair, skin, and scalp. It was for breach of that covenant that the plaintiff now sued. Since the date of the agreement it was admitted that the defendant had sold two preparations, one called "Horn's medical fluid soap-tar," and another called "Dr. Horn's transparent fluid soap," which were for use in certain diseased conditions of the skin. The statement of claim asked for an injunction restraining the infringements of trade-mark. If plaintiff obtained an injunction in the terms of the covenant he did not care about the trade-marks. The main thing was that for some time past the defendant had been selling to patients or other persons, who communicated with him, these preparations.

Mr. Frost, who appeared for the defendant, said he did not dispute this. The question was whether these preparations were included in the covenant.

Mr. Warrington said then the question was whether the covenant was reasonable. The covenant, he submitted, was necessary for the protection of the plaintiff in reference to the articles sold. The preparations enumerated in the covenant were, on the face of them, intended for diseases of the hair, skin, and scalp in the strict sense. But some were in the nature of a tonic, or reinvigorating. Others were in the nature of a soap of an emollient nature. What the covenant was intended to guard against was this: It was to prevent the defendant, immediately after selling these preparations, manufacturing or selling similar preparations for the same purpose. If this covenant were necessary for the protection of the plaintiff, then, he took it, the covenant was a valid one. His learned friend's objection seemed to be that it was unlimited in time and space, and that the covenant was not reasonably necessary. He submitted that the covenant was necessary in the plaintiff's interest, and that defendant having committed a breach of it he should be restrained by the court.

Mr. Frost said the proper way to look at this case was to see what was actually sold. That was perfectly definite. Defendant sold certain specific articles; he did not sell a general business in toilet-requisites. A covenant was not reasonable if it went beyond the limits of the business sold, and if it injured the public interest. There was no covenant by the defendant that if he made any new inventions he should communicate them to the plaintiff.

His Lordship held that the covenant was necessary for the plaintiff's protection. Although it was wide, it was not too wide to be a reasonable protection for the purchaser of the business. It seemed to him that the plaintiff had succeeded, and he should grant the injunction asked for.

Warehousing Galls.

IN the City of London Court on March 16, an action was brought by Messrs. T. L. Knight & Co., Limehouse, E., against Messrs. Henri Vogt & Co., Rood Lane, E.C., to recover 34*l.* 10*s.* 11*d.* for warehousing certain galls for them. The defendants had paid 19*l.* 0*s.* 2*d.* into Court, but they counterclaimed for the balance for short delivery of the galls which had been warehoused. It was stated that in November last defendants purchased a consignment of galls in the market, and instructed plaintiffs, who are wharfingers, to collect and warehouse them. The galls were collected, their weight being 106 cwt. 2 qrs. 4 lbs. These were delivered to the plaintiffs, but the plaintiffs now only held 102 cwt. 1 qr. 16 lbs., leaving a difference of 4 cwt. odd. Mr. Pitt, from Leech & Co., wharfingers, deposed to the weights, but admitted that the galls were in very weak cases, and rolled about a good deal. They had originally come from Shanghai, and after being taken to Antwerp were transhipped to London. They had been in warehouse for two years, and were very dry. Mr. Vogt said the value of galls in November was 75*s.* to 85*s.* per cwt., and he was now counterclaiming at the lower rate. If the cases were in a bad condition the plaintiffs ought not to have received them; but, having done so, he contended that the plaintiffs were liable for the loss which had taken place. The plaintiffs contended that the loss of the galls did not take place in consequence of negligence on their part. It was obvious that they were very dry, and some of them had fallen out. The Deputy Judge (Mr. G. Pitt-Lewis) suggested that, the plaintiffs were liable for the loss because they were common carriers, but plaintiffs' counsel argued that his clients were not common carriers, and the Deputy Judge said he would take time to consider the legal bearings of the cases which had been decided on the point.

Sale of Food and Drugs Acts.

ALUM BAKING-POWDER.

AT Swindon Police Court on March 15, four retailers were summoned for selling baking-powder or egg-powder containing alum. The first case was against Arthur W. Burson, grocer, trading as Freeth & Son, and was taken under Section 3 of the Sale of Food and Drugs Act, 1875, which prohibits the mixing and sale of any article of food containing an ingredient or material injurious to health. It was certified that the defendant had sold baking-powder contain-

ing 20 per cent. of alum, 14 per cent. bicarbonate of soda, and 66 per cent. of farinaceous matter. Dr. Tubb Thomas, Medical Officer of Health to the Wilts County Council, testified that the continual use of alum was injurious to the system. There was practically no defence other than that the County Council had not given due notice of the new Act, and the Bench fined defendant 1*s.*, and costs. Later this fine was increased to 1*l.* by the Bench, as the Magistrates wished to show their objection to the conduct of Mr. Nation, the maker of the powder, against whom a summons was also heard at the same time.

IN the case of Elizabeth Carter, grocer, Stratton, the baking-powder sold contained 22 per cent. of alum, and she was fined 5*s.*, and costs.

WILLIAM BECK, said to be a druggist, but not on the register, Malmesbury, was similarly fined 10*s.*, and costs, for selling a powder which contained 20 per cent. of alum.

TWO cases were adjourned. These were against Louisa Hollyoake, first in respect to the sale of four packets of baking-powder containing 19 per cent. of alum, and this was adjourned to enable defendant to be present. She was also summoned for selling egg-powder containing 18 per cent. of alum. Dr. Bernard Dyer was the analyst in all these cases.

SIMILAR prosecutions came before the Wootton Bassett County Justices on March 10, the defendants being Herbert Hunt and James Edmund Watts, both of Wootton Bassett. In these cases the percentage of alum was 22 and 20 respectively. For the defence it was pleaded that no public notice had been given of the new Act, and the Bench imposed nominal fines of 1*s.* and costs.

LINSEED MEAL.

TWO cases have been heard at Carlow, in which retailers were summoned for selling as linseed meal ground linseed cake. Sir Charles Cameron's certificates showed that nearly all the oil had been extracted from the cake. The prosecution urged that linseed meal was a drug, but the defendants pleaded that they had sold the meal as they received it. One of the defendants, Mr. John Folly, explained through his solicitor that he had purchased the meal from Messrs. Wood, Webb & Co., Dublin, who invoiced it "L. Meal," and the invoice was shown to the complainant after the time allowed for giving notice for warranted defence. Defendant was in the habit of selling linseed meal for calf-feeding. The Magistrates imposed a fine of 6*d.* and costs in each case.

CAMPHORATED OIL.

AT Tottenham Police Court on March 15, Arthur Henry Jenkins, chemist, Green Lanes, Tottenham, was summoned for selling camphorated oil which the Public Analyst certified was deficient in camphor to the extent of 44 per cent. The defendant did not dispute the analysis, but said he made the oil two days before the inspector called, and in doing so he used a stone jar instead of a glass jar, and therefore could not see if all the camphor was dissolved. The sample in dispute was the first quantity sold out of the jar, and he used the proper parts. The Pharmacopoeia did not say whether hot or cold oil should be used, and as he used cold oil the camphor did not readily dissolve.

The Chairman (Dr. Daly) observed that it said "dissolve the camphor in the olive oil." If it would not dissolve in cold oil, warm oil should be used. The inspector said he had sampled goods from the defendant's shop before, and found them genuine, and a fine of 5*s.* and costs, with the analyst's fee, was imposed.

MAGNESIA.

AT Swindon Petty Sessions on March 15, Arthur Willis, grocer, Highworth, was summoned for selling as magnesia carbonate of magnesia instead of magnesium oxide. The defendant, on promising to destroy the remainder of his stock of the drug, was fined 1*s.* and costs.

Merchandise-marks Act.

ALUM BAKING-POWDER.

AT the Swindon Police Court on March 15, Edward J. Nation, Redcross Works, St. Philips, Bristol, was charged

with applying a false trade-description to five gross-packets of baking-powder which he had delivered to A. W. Burson, grocer, Swindon, in August last. The powder, according to Dr. Bernard Dyer's analysis, contained at least one-fifth part of alum, a quantity which was submitted to be injurious to health. The label on the baking-powder was in the following terms:—

Nation's Baking-powder.

This is an alum preparation which prevents indigestion.

Dr. Dyer, in evidence, stated that the label was incorrect, and Dr. Tubb Thomas confirmed this evidence. Dr. Thomas said it was absolutely incorrect to say that the preparation was a preventive of indigestion, and he considered it to be a very harmful preparation. Mr. Withy, who appeared for the defence, submitted that the words added to the title were merely a piece of commercial puffery such as was seen in hundreds of advertisements every day, and he asked the Bench to treat it as such, and not as part of the description. The Bench took a considerable time to consider the matter, and, on returning, said they did not feel justified in convicting, although they believed a gross fraud had been committed. They therefore dismissed the case.

County Court Cases.

SUMMONS BY THE SOCIETY.

AT Birmingham County Court on March 20, the Pharmaceutical Society sought to enforce a judgment-summons against Charles Mottram, chemist's assistant, Balsall Heath, for a debt of 5*l.*, being the amount of a verdict obtained against the defendant for a contravention of the Pharmacy Act (*C. & D.*, January 20, page 87). Mr. Rigby, who represented the defendant, said his client only earned 15*s.* a week, 12*s.* of which went for his maintenance, and asked that no order be made. Defendant, in answer to questions by Mr. Cohen, who appeared for the Society, said he had had notice to leave his situation. His Honour Judge Whitehorne said in the circumstances he could not make any order. Mr. Cohen asked His Honour to make a new order. Mr. Rigby pointed out that this was not an ordinary trade debt but a debt by Act of Parliament. It was rather hard upon the defendant, who was an employé, that he should be liable for selling the poisons. His Honour said it was a curious question as to whether the penalty should be paid by the man or his employer. He would not go into the question now, because Mr. Cohen had not proved any means. He would, however, grant a new order, not under the Debtors Act, but with the action. Mr. Cohen asked for 1*l.* a month. His Honour asked if it was worth while to ask for that. Mr. Cohen replied that he would have to issue a judgment-summons for the first instalment. His Honour: Very well.

Gazette.

Partnerships Dissolved.

Burford, E. E., Burford, R. A., and Burford, J. F., under the style of Burford Brothers, Canal Street, Camberwell, S.E., salt, oil, vinegar, and soda merchants.

Butterworth, C. M., Austin, J., and Butterworth, J., under the style of Butterworth, Austin & Co., Manchester, wholesale drysalters and confectioners.

Dowding, A. W. W., and Flegg, F. A. M., under the style of Dowding and Flegg, Wanstead and George Lane, Woodford, E., physicians, &c.

Whitaker, J. S., and Youatt, under the style of Whitaker and Youatt, Great Yarmouth, physicians and surgeons.

Lord Chamberlain's Office, St. James's Palace, March 17, 1900.

The Queen has been pleased to appoint Joseph, Lord Lister P.R.S., F.R.C.S., and Surgeon Extraordinary to her Majesty, to be Serjeant-Surgeon in Ordinary to her Majesty, in the room of Sir James Paget, Bart., deceased.

The Queen has also been pleased to appoint Frederick Treves, Esq., F.R.C.S., to be one of the Surgeons Extraordinary to her Majesty.

Bankruptcy Report.

Re WILLIAM DUNCAN, 63 High Street, Blairgowrie, Doctor of Medicine.

CREDITORS in this estate must submit their claims to the trustee, Mr. J. McKinnon, Royal Bank Buildings, Blairgowrie, on or before April 5, and a meeting of the creditors will be held at Perth Sheriff Court on May 4. The liabilities, as far as can be at present ascertained, are 304*l.*, and the assets, less preference claims, 70*l.*

Deed of Arrangement.

Golistray, Charles, trading as the "Goldstraw Manufacturing Company," Victoria House, Bilston; Castle Street, Roseville, Coseley; and Library Buildings, Tipton; and residing at Castle Cottage, Dudley, wholesale and retail chemist. Trustee, John B. Annan, Wolverhampton, estate agent. Dated March 12; filed March 13. Liabilities unsecured, 1,668*l. 1s. 4d.*; estimated net assets, 454*l. 15s. 1d.* Composition of 6*s. 6d.* in the pound, payable 2*s.* at four months, 2*s.* at six months, and 2*s. 6d.* at twelve months from date hereof, secured by an assignment upon trust, &c.; the last payment being further (conditionally) secured by sureties. The following are scheduled as creditors:—

	£	s.	d.
Ayre Brothers, Hull	21	0	0
Ayrton & Saunders, Liverpool	19	0	0
Baiss Brothers & Stevenson, London	13	0	0
Baker, J., Bilston	100	0	0
Bilston & South, Wednesbury	12	0	0
Booth, James, Birmingham	10	0	0
Bovril (Limited), Birmingham	23	0	0
Colthurst & Harding, Bristol	33	0	0
Cook, Edward, & Co. (Limited), London	12	0	0
Crosbie & Co., London	17	0	0
Delahay, William, Great Bridge	13	0	0
Evans, Sons & Co., Liverpool	77	0	0
Fox, Francis & Co., Bristol	22	0	0
Garratt, J. E., London	11	0	0
Gaunt & Hickman, Wolverhampton	65	0	0
Goldstraw, Edith, Dudley	14	0	0
Goldstraw, Lilian, Dudley	16	0	0
Herald, Dudley	30	0	0
Newball & Mason, Nottingham	18	0	0
Pink, E. & T., London	22	0	0
Polley, Sydney, Birmingham	10	0	0
Preedy, A., & Sons, Dudley	16	0	0
Salt, T., Lichfield	66	0	0
Sanger, J., & Sons, London	58	0	0
Sissons Brothers & Co. (Limited), Hull	15	0	0
Tomlinson, F., Dudley	16	0	0
Warwick Saw Mills Company, Manchester	12	0	0
Wyleys (Limited), Coventry	76	0	0
Bankers' claims	570	0	0

Marriage.

CHALMERS—DRYSDALE.—At Aberdour, Fife, on March 14, by the Rev. William Henry Gray, M.A., Andrew Chalmers, chemist, Newcastle-on-Tyne, to Mary Jane, daughter of Mr. Thos. Drysdale, Aberdour.

Deaths.

CLARK.—At Lancaster, on March 19, Mr. Edward Clark, J.P., chemist and druggist. Aged 81. The late Mr. Clark opened in 1849 the pharmacy in Market Street, Lancaster, which he disposed of in 1877 to Mr. H. Troughton. He was a member of the Lancaster Town Council for twenty years, retiring in 1893, and was twice Mayor. He had been for fifteen years a regular attendant upon the Borough Bench of Magistrates, and for a similar period acted as a trustee of the local charities. Up to four years ago he was also a member of the committee of the Lancaster Infirmary. He was unmarried.

DAVIE.—At Glasgow, on March 15, of acute pneumonia, Mr. John Scott Davie, chemist and druggist. Aged 22. Mr. Davie was apprenticed to Dr. James Brown, Alexandria, and afterwards went to Glasgow, where he was assistant to Dr. Kennedy, and latterly with the New Apothecaries Company. He passed the Minor in April, 1899, and during the past six months has acted as Demonstrator in the Glasgow School of Pharmacy. He was a brilliant and enthusiastic student, and had almost completed his studies for the Major examination. He was a competitor in our Students' Corner; indeed, the last work he did, we are informed, was to send in his report of this month's analysis.

GILES.—On March 3, Mr. T. R. Giles, chemist and druggist, 341 Upper Parliament Street, Liverpool. Aged 47.

NEWSHAM.—On February 23, Mr. Wm. Newsham, chemist and druggist, 119 Moor Lane, Preston. Aged 57.

PICKARD.—On March 19, at 300A Lower Broughton Road, Broughton, Manchester, Matthew Pickard, formerly of 193 Greengate, Salford, chemist. Aged 86.

SLATER.—On March 1, Mr. Arthur Slater, chemist and druggist, Auburn Place, New Whittington, Derbyshire. Aged 89.

STREET.—At Crediton, near Exeter, on March 17, Miss Sarah Jane Street, chemist and druggist. Aged 74. Miss Street was a local celebrity, a woman of remarkable intellect and talent, and had carried on business as a chemist and druggist in the High Street for many years. The business of a chemist appears to have been carried on in Crediton for upwards of a century by two spinsters successively. Miss Street had resided in the house for over sixty years, and for over thirty years had conducted the business. The former proprietress was a Miss Wreford, who died at an advanced age. Miss Wreford appeared to have studied under a medical man, whilst Miss Street learnt her pharmacy from Miss Wreford. On the latter's death Miss Street succeeded to the business, which she carried on to the time of her death. She had been ill for some time past, but she made her books up to date last week. She was in business before the passing of the Act, but was widely known as a skilful pharmacist, as was evidenced by the confidence and respect in which she was held and the success she attained. She was an Unitarian, and her kindly advice and unostentatious charity will be greatly missed by the poor.

THOM.—On March 5, Mr. John Thom, chemist and druggist, 39 Upton Lane, Forest Gate, E. Aged 35.

Recent Wills.

GREENISH.—The will, dated September 8, 1892, of the late Mr. Thomas Greenish, pharmaceutical chemist, and past-President of the Pharmaceutical Society of Great Britain, of 20 New Street, Cavendish Square, W., was proved in the principal registry on February 2 last, by Mr. T. E. Greenish and Professor Henry G. Greenish, his sons and executors. The testator bequeaths to each of his two daughters the sum of 200*l.* and one of his leasehold houses in Maitland Park Road, N.W., 100*l.* to his grandson, and smaller legacies to each of his two servants. The remainder of his personal estate, including his businesses at New Street and Conduit Street, W., he devises to his two sons above named, in equal shares. The gross value of the estate is sworn at 7,984*l. 9s. 9d.*

MOUNT.—The will of the late William Mount, J.P., chemist, of Palace Street, Canterbury, who died on December 16 last, has been proved by his widow and executrix, Mrs. Jane Mount. The gross value of the estate amounts to 1,213*l. 10s. 10d.*

PEGG.—The will, dated April 9, 1899, of Mr. Herbert Pegg, pharmaceutical chemist, of High Street, Solihull, Birmingham, was proved on January 3 by Mrs. Alice Gertrude Pegg, the widow, and Adolphus Vaughan Bernays, M.B., the executors. The testator bequeathed 5,000*l.*, and all his real and personal estate to his wife. To his friend Amelia Jane Jackson he left 500*l.*, and to Annie Francis Martin and Joseph Lucas (retired chemist) 250*l.* each. Although not directly mentioning his nephew, Joseph E. J. Pegg, he has made known his desires regarding him and his real estate to his wife, and hopes that she will carry them out. The value of the estate was sworn at 13,056*l. 11s. 1d.*

Corner for Students.

GRANULAR PREPARATIONS.

EFFERVESCENT citrates are prepared by heating together sodium bicarbonate, citric acid, tartaric acid, and sugar at a suitable temperature. A pasty mass is thus produced, which is first granulated, and then dried. Granulation is effected by the molecule of water of crystallisation in the citric acid liquefying the acid in presence of heat, and this forms with the sugar and the other powders a kind of cement, which binds them together and tends to produce the granular condition desired. In dealing with citrate of caffeine, citro-tartrate of soda, and citrate-of-lithia granules the powders are mixed without any preliminary drying; but with granules of phosphate and sulphate of soda and sulphate of magnesia the water of crystallisation must be driven off, otherwise a hard, lumpy, insoluble, and unsatisfactory granule is produced. During the process there is a loss of CO_2 and water, the loss being greater the higher the temperature. It is recommended by Messrs. Davidson and Lunan, who have investigated the subject, that the temperature for granulation should not be higher than $70^\circ \text{ C}.$, instead of the boiling-point of water as specified by the B.P., while the granules should be dried at $50^\circ \text{ C}.$, in place of the official temperature of $54.4^\circ \text{ C}.$. The B.P. gives no directions as to the sizes of sieves, but a No. 9 sieve is a convenient size for most sweet granules, while lithia granules, which contain no sugar, are made smaller. By No. 9 sieve is meant a sieve with nine meshes to the linear inch, or eighty-one to the square inch; No. 20 means 400 to the square inch, and so on. The quantities given in the B.P. work out, when finished, to "about" 100 oz. and 1,000 grammes, and, if a small quantity be required, all the calculation necessary is to multiply each ingredient by the number of grains wanted in the finished product, and divide by 100. Supposing, for example, that 2 oz. avoirdupois were required, the following calculation is made:—

	Grains
Sodium bicarbonate ...	$51 \times 8.75 \div 100$, or simply $\times 8.75 = 446.25$
Acid tartaric ...	$27 \times 8.75 = 236.25$
Acid citric ...	$18 \times 8.75 = 157.50$
Refined sugar ...	$14 \times 8.75 = 122.50$
Citrate of caffeine ...	$4 \times 8.75 = 35.00$
	114 $\times 8.75 = 997.05$
Finished granules ...	$100 \times 8.75 = 875.00$

An identical method of calculation is applied to all the other granular preparations. It is found in actual practice that the granules do not in every case produce the same weight of finished product, this being due to various causes; but the student must take the B.P. as his guide in estimating the loss, even though it is not in each case strictly correct. Starting with the weight of undried ingredients, the various granular powders yield as follows:—

Effervescent citrate of caffeine ...	... 114	yield about 100
Effervescent citrate of lithia ...	... 115	" 100
Effervescent sulphate of magnesia ...	... 128	" 100
Effervescent citro-tartrate of soda ...	... 111	" 100
Effervescent phosphate of soda ...	... 145	" 100
Effervescent sulphate of soda ...	... 145	" 100

Obviously the formulæ of the two last must vary in their results, because, while the quantities are identical in both, the sodium phosphate is dried till it loses 60 per cent. of its weight, and the sulphate till it loses 56 per cent. only. In the sulphate of magnesia the loss is 23 per cent. In every case, of course, the loss indicates that the entire water of crystallisation is driven off.

COLLEGE NOTES.

IMPERIAL COLLEGE OF PHARMACY.—The students visited Kew Gardens the other day, when the Principal (Mr. Frederick Davis) pointed out various interesting specimens, and especially commented upon the iris, crocus, orchid, zingiber, smilax, and other monocotyledons. The remarkable specimens of *Pinus Larix*, *Abies excelsa*, and *Juniperus Sabina* were visited, and after them the museums.

LEEDS COLLEGE OF PHARMACY.—On Saturday, March 17, the first botanical excursion in connection with this college took place to East Keswick. A large number of specimens were obtained, and a little excitement was introduced into the ramble by the Bramham Hounds, as they passed through the woods where the students were exploring. Tea was provided at the Wellington Hotel at the close of a most enjoyable afternoon.

WEST OF SCOTLAND COLLEGE OF PHARMACY.—A handsome gift has just been made to this institution by Mr. John McMillan, chemist, Glasgow, in the shape of the splendid collection of drugs shown at the recent tercentenary exhibition of the Faculty of Physicians and Surgeons. The drugs, which are all picked specimens, comprise the following, among others:—Cinchona-bark (magnificent quills of red bark about 18 inches long), cassia fruit (five large whole pods), colocynth (whole fruits, peeled and unpeeled), acacia, ammoniacum, asafetida, benzoin, gamboge, guaiacum, myrrh, scammonium, aloes, aloin, elaterium, podophyllin,aconite-root, belladonna, calumba, ginger, jalap, sarsaparilla, scammony, squill, cascarilla, crocus, nux vomica, quassia, quillaia, senna leaves and pods, uva ursi, and cantharides. The specimens form a most valuable addition to the *materia medica* collection of the college.

Business Changes.

Notices are inserted free in this section if properly authenticated.

BOOTS, CASH CHEMISTS (EASTERN), LIMITED, are reconstructing large business premises in Drake Street, Rochdale, for use as a branch shop.

MESSRS. LEWIS & BURROWS (LIMITED) have sold their branch shop at 18 Wilton Road, S.W., to their manager, Mr. Evans. The company have opened a new store at Portobello Road, W.

MR. T. BOOTH JACKSON has purchased the business of William Addis & Son, bone and ivory brush manufacturers, at 44 Herbert Street, New North Road, N., but will carry on the same under the old firm's name.

THE business of the late Mr. Frederick Lumby, chemist, at Arkwright Street, Nottingham, has been purchased by Boots, Cash Chemists (Eastern) (Limited). The branch post-office is being removed to other premises.

MESSRS. JOHN BARNES & CO. (LIMITED), who have opened large stores at Finchley Road, South Hampstead, N.W., have appointed Mr. A. E. Skeels, chemist and druggist, as manager of the drug and dispensing department.

MESSRS. BRUMMERSTAEDT & GROH, manufacturing chemists, of 25 rue de la Senne, Brussels, inform us that they have taken over the business of Mr. Herman Brummerstaedt, formerly of 19 rue Grétry, Brussels, and will in future carry it on in their own name.

THE wholesale business of Hicks & Co. (Limited), Cardiff, will in future be carried on by the reconstructed company under the name of Bennett & Co. (Limited), with offices at Station Terrace, Cardiff. Mr. Hicks will continue the retail portion as a private concern, under the style of W. T. Hicks & Co., at 28 Duke Street, Cardiff.

THE business carried on for many years under the title of H. Natban & Co. at 102 Fore Street, E.C., and in Sydney, Brisbane, Melbourne, and New York under the name of S. Hoffnung & Co., has been converted into a limited-liability company, under the title of S. Hoffnung & Co. (Limited). The conversion is made for family and private reasons, and no shares are offered to the public.

MR. R. J. REUTER, sole agent for Ferd. Mühlens' (No. 4,711) Eau de Cologne, has, owing to large increase, moved the wholesale section of the firm's business from New Bond Street to larger premises at 5 Well Street, London, E.C., to which all orders and communications should be addressed in future. The retail branch of the business at 62 New Bond Street, W., will be carried on as usual.

Observations and Reflections.

By XRAYSER.

TAXATION AT RANDOM is not what we have a right to expect from a Minister in the position of the Chancellor of the Exchequer. He is supposed to be an expert in questions of finance and commerce, and if he is deficient in any respect he has officials of great experience at his elbow, and a whole worldful of experts outside to whom he can appeal. And yet, said Sir Michael Hicks-Beach to the deputation of London brokers who waited on him last week, "it was always necessary, when a new duty was proposed, for the Chancellor to propose it without being able to make as full an inquiry into the matter as he could make after the proposal had been made." That he will hear of plenty of objections to his tax when he has proposed one, is sure enough—some perhaps which he has not thought of. But this does not justify him making a leap in the dark such as he confesses to have done. He almost admits that he did not realise the difference between Stock Exchange and produce-market transactions. It is news to him that the produce-brokers are not protected as those on the Stock Exchange are. He asks to see specimens of produce-contract notes; he evidently has the notion that there is something very distinctive, almost sacred, about the business of a broker, and he hazards one or two alternative suggestions which the most innocent of financiers could hardly have offered seriously. These things show how carelessly the new duty was adopted.

* * * *

THE DEPUTY-CHAIRMAN of the Loudon Chamber of Commerce, who "led" for the brokers, said the tax would cost his firm 750*l.* a year, and that they could not pass it on. Mr. Innes Rogers must know his own business, but why he cannot "pass it on" is not comprehensible. Other brokers will certainly do so if the tax is imposed. Indeed, it is a financial axiom that trading-profits cannot be taxed. Somehow or another, directly or indirectly, any tax apparently imposed on trade gets down to the consumer—and always with accumulations. Mr. Innes Rogers may flatter himself that he will pay this 750*l.* a year to the Revenue; as a matter of fact he will be no more entitled to that credit than Mr. Beecham would be in respect of the thousands a year which he pays for medicine-stamps.

* * * *

MR. T. P. O'CONNOR, M.P., is a clever gentleman, and has had plenty of experience in obstructive tactics. But how came he to be selected as the champion of the medical profession in the House of Commons against the Midwives Bill? The Bill seems to be one that will do some good by guaranteeing that anyone calling herself a midwife will have had a certain training, and it is difficult to see how, it can do any harm, at all events to the community. There are a dozen or more medical men in the House of Commons, and when all of them leave Mr. O'Connor to lead the opposition to the Bill the representatives of the public may be excused for thinking that there is not much of serious import that can be said against the proposal. Even Mr. O'Connor made a poor fight against the second reading. The whole discussion, including two divisions, was got through in three-quarters of an hour. The *Lancet's* plebiscite—which showed that out of 7,250 doctors who voted 1,547 were actually in favour of the Bill—was a distinct score for its promoters. The cry of the craft in danger had been so sedulously pushed, and medical men are generally so keenly alive to their own interests, that practical unanimity against the measure among them might have been anticipated.

LENT seems to have very little influence on the festivities

of pharmacists. Three or four dinners were reported last week, and two or three are announced for the current week. The reports of the speeches at these dinners are often interesting, but those who attend them, and those who read what is said at them, must have sometimes sighed for just a little more of the spice of variety in the programme. This might be attained, I fancy, without too much of a revolution. The *C. & D.* reporter at one of the dinners last week mentions that "for some unexplained reason" nobody proposed the toast of the visitors, though happily this did not prevent a brave gentleman from "responding." If only this accident could be made systematic we should be able to get twice as many topics discussed in an evening by the same number of speakers as we have now. If the medical profession, the Pharmaceutical Society, the local Association, and the visitors must be toasted, would not one speech instead of a pair suffice sometimes? A still bolder innovation would be to select the speakers in advance, give them each ten minutes, let every speaker choose his own subject, fine him if he fell short or exceeded his time, and at the end of the proceedings take a vote of the company and give a prize to the speaker who gave the most pleasure. A dinner arranged on this plan would ensure a lively evening, but I fear my notions are in advance of my time.

* * * * *

THE CHIEF INSPECTOR of Weights and Measures in the City of London pricks our bubble-importance in the most delicate manner. We all thought that when the City and the L.C.C. quarrelled about "the stamping of glass measures," chemists' measures were the *casus belli*. Now it appears that these were not thought of, but that the dispute occurred in respect of publicans' glass measures. But can anybody tell me what these are? The Editor, I know, is an authority on many things, but I doubt if he is specially posted on the internal economy of public-houses. I therefore went into one myself on Saturday, for the purposes of research simply. A brisk business was proceeding; beer and stout and a combination of these were served in metal mugs, spirits were measured in little metal cups like egg-cups without a foot—there were, of course, tumblers and wine-glasses of various shapes and styles, but the Act does not require these to be stamped unless they are professed to contain a definite measure—and "quarters" to take away were being supplied in bottles. I saw nothing in the way of a stamped-glass measure, and I am wondering what there can be of the kind important enough to justify this state of civil war between the rival rulers of the greatest city in the world.

* * * * *

O Sancta Simplicitas! That there should be people who take as final the first words of a Minister in charge of a Government Bill! That anybody should suppose that "Mr. Ritchie's attitude" when he declared it was impossible that Clause 2 could be altered was anything but conventional! Why, Ministers always speak in that way to outsiders who venture into their presence. If Messrs. Martindale and Carteighe had each had an M.P. with him, Mr. Ritchie would have promised that the matter should be carefully looked into; if a dozen M.P.'s had attacked him, he would have asked them to pass the second reading of the Bill and promised that he would consider any amendment in Committee; while if the revolt became at all general he would draft an alternative clause himself. But to the plenipotentiaries of the Pharmaceutical Society the Minister was, naturally enough, as a wall of adamant. And this suffices to dissipate their courage. They who, while there seemed no prospect of a discussion in Parliament, professed their eagerness for the fray, now call upon their followers to march from the field and let the Legislature do what it likes. They will protest—and that is all. Very dignified, no doubt, but none the less an abandonment of the opportunity of a lifetime which will be ruined and, perhaps, cursed by the pharmacists who come after us.

* "SANITAS" *
EMBROCATION
 8d., 1/-, and 2/6 Bottles.

"SANITAS"
 AND OTHER
DISINFECTANTS

SULPHUR FUMIGATING CANDLES (Kingzett's Patents)
 6d., 9d., and 1/- each.

"FORMIC-SULPHUGATORS," 1/- & 1/6 each.
 PRESERVED PEROXIDE OF HYDROGEN
 (Kingzett's Patent).

MOTH PAPER, BLOCKS AND CRYSTALS.
 WEED DESTROYER, &c., &c.

THE SANITAS CO., LIMITED, BETHNAL GREEN, LONDON.

AND 636-642 W. 55 STREET, NEW YORK. *

G. S. MUMFORD

FARRINGDON ROAD, LONDON, E.C.

No 1 Finest Pure CRUSHED LINSEED	19/- <small>per cwt.</small>	Finest Pure STARCH POWDER	18/- <small>per cwt.</small>
No. 2 Pure CRUSHED LINSEED	18/- <small>per cwt.</small>	No 1 Finest Light Pure PRECIPITATED CHALK	25/- <small>per cwt.</small>
Best Cleaned LINSEED (TEA)	19/- <small>per cwt.</small>	No 2 Pure PRECIPITATED CHALK	21/- <small>per cwt.</small>
No. 1 Finest Pure FULLER'S EARTH (Light Colour)	15/- <small>per cwt.</small>	Finest Levigated "WHITE EARTH" (Toilet purposes).	18/- <small>per cwt.</small>
Finest TART ACID	Lowest Cur. Prices	Finest Pure TOILET OATMEAL, SPECIAL	32/- <small>per cwt.</small>
Finest Pure LIQUORICE JUICE	10/- <small>per lb.</small>	Finest APRICOT ROOT	9/- <small>per lb.</small>

† CARRIAGE PAID to Railway Stations within 300 miles of London
 allowances made for distances beyond) on a total weight of 1lb.
 and upwards of above articles Smaller parcels delivered free on rail
 London at above prices

PUREST IN ENGLAND.

BOURNE TABLE WATERS

Supplied in Six Dozen Cases, Carriage Paid, by

R. M. MILLS & CO.,
 BOURNE,
 LINCOLNSHIRE.

West End Agents, WHEATLEY & SONS, 24 South Audley Street, W.
 And of all Chemists, Wine Merchants, Hotels, &c.

TYPHOID FEVER.

OFFICIAL GOVERNMENT STATEMENT:

"Wherever the

PASTEUR (Chamberland) FILTER
 has been introduced

TYPHOID FEVER
 has disappeared."

SOLE LICENSEES AND MAKERS:

J. DEFRIES & SONS, LTD., 146 and 147 HOUNSDITCH,
 LONDON, E.C.
 West-end Showrooms: 203 VICTORIA ST., S.W.

"HIPPI."

Can be obtained from all Chemists,
 Grocers, &c., in 4-oz. Tins,
 price 1s.

A PURE MUTTON ESSENCE

Can be obtained from all Chemists, Grocers, &c., in 4-oz. Tins,
 price 1s.

SOLD WHOLESALE BY
GEO. NELSON, DALE & CO., Ltd.
 14 DOWCATE HILL, LONDON, E.C.

ITROSYL For making
 SPT. AETHER NIT.
 B.P. 1898.

"Deserves the gratitude of medicine and pharmacy."
The Chemist & Druggist.

Fletcher, Fletcher & C^o. Ltd. London & Sydney.

Editorial Comments.

—♦—
Evolution in Pharmacy.

THE personal side of pharmacy has lately had little showing, owing to the more assertive attitude of the political, and that is a good reason why those who have a personal liking for pharmacy should not overlook what the individual may do in order to give fuller exercise to his scientific abilities. For relieving the changed condition of pharmacy, which has resulted from the stress of competition, many and various have been the suggestions offered, but little of practical importance has been achieved generally. Increased severity in the examinations, further parliamentary protection, more unity amongst ourselves have been the texts of many sermons, but all the time the process of natural selection has been silently and surely at work. Meanwhile some have been working out their own salvation. Here is an actual example:—

A. and B. lived in the same town, and the pressure of competition and cutting was felt alike by both. A. said, "I don't care, I shall not give in"; and B. said, "You must go with the times, you know." A year or two passed away, and A. said, "Well, I got into an awful funk, thought all my business was going; but here I am still. I sell few patents, no soaps, no sheep-dip, no scent, no hair-brushes, or practically none; but I still make my living out of the higher branches of the business. Not infrequently a customer comes in and says, 'Will you kindly make up my prescription for me? I will call again in a few minutes—I am just going to buy some Eno's salt of Mr. B.' In the hope of stopping my customers from going to Mr. B. for their Eno's salt I reduced my price down to his, but with no effect, for they stand at my counter with obvious 'chemists' parcels in their hands. Again, previous to the beginning of the cutting system in our neighbourhood, complaint and carping at prices were the order of the day; but now I seldom hear any—the people pay my price, and thank me. I have cultivated pathological analysis and microscopical work, and I find a great deal of interest and pecuniary profit in them. This branch I relegate as much as possible to one part of the day, because I recognise the fact that my income depends chiefly upon my presence at the counter, and only secondarily upon my laboratory-work. I do not pretend to think that I get all the higher work of a pharmacy, and that Mr. B. gets none; but I know that I get a much greater proportion than he

does, that the cutting system has not reduced my dispensing, while my retailing of infants' foods has fallen off steadily. Indeed, at one time I sold candles and matches."

On inquiring of Mr. B., he says he is content with the change. He sells a dozen patents where he sold one, and that by careful buying he makes the low prices remunerative; that he keeps another assistant, takes a holiday when he will, and stands no nonsense from his customers.

The experience of A. and B. is not exceptional. In most towns throughout Great Britain there are one or more pharmacists of the A. type and several of the B. type; but conditions vary greatly in different parts of the country. In some towns the "chemist" is little more than a retailer of proprietary medicines—his own, or other people's—and men like A. are not to be found; while in others, where the conditions are favourable, A. is well represented.

From this it would appear that a selective process is going on slowly—that there are certain men amongst us who, partly from position and partly from natural inclination, are securing for themselves more of the professional side of our mixed calling, while others, either from force of circumstances or from being more keen business men, obtain the lion's share of the trading side. It is often said—and probably, in the main, truly said—by pushing men of type B. that Major men are no good for them, that they would prefer even unqualified men as salesmen. This, again, shows the trend of affairs, and seems to indicate pretty plainly (speaking generally again) that the more scientific and highly-trained the man the less taste and devotion he has for the commercial side. This idea is also borne out by the record of the evolution of the "chemist." Whence came he, and whither does he tend? The candles and matches of A.'s early experience answer the first part of the question: the druggist of those days was a species derived by natural selection from the grocer. Whither he tends is not so easily answered; but, judging by the evidence adduced, the selective process is still going on, and a species is coming into being which suggests the possibility of ultimately becoming much more professional than its sires. Seeing that it is the lot, at present, for the majority of registered "chemists" to find themselves in the category of B., it may well be asked, Is it necessary for such a man to be forced to face such a stiff examination as the Minor? But, on the other hand, if a man wishes to be in the running for the higher branches, as described by A., he requires, and will not find superfluous, all the training he can get, and the scope of the Major examination might be extended, and still not be too much. Urine-analysis and bacteriology might be added, and this would soon have the effect of giving the medical man greater confidence in the assistance he should get from the pharmacist not only in supplying the drugs he prescribes, but in aiding him in the laboratory examinations of secretions and excretions and parasitic affections, upon which successful treatment can alone be based.

Public Analysts' Qualifications.

IT is fully a year since the Institute of Chemistry got the Local Government Boards of England and Ireland to recognise the qualifications of the Institute as requisite for persons who are to serve as public analysts. The Irish Local Government Board has enforced the agreement for a year, and now the English Board under the powers granted by Sub-section 5 of Section 3 of the Sale of Food and Drugs Act, 1899, has formulated a regulation respecting the proof of competency to be produced by applicants for the position of public analyst. For a copy of the regulation we are indebted to

Mr. Henry Chaplin, the President of the Local Government Board. It is in the following terms:—

Every person appointed on or after the First day of January, one thousand nine hundred, to the office of public analyst, shall furnish such proof as we may deem sufficient of his competent skill in and knowledge of (a) analytical chemistry, (b) therapeutics, and (c) microscopy.

Such proof shall in every case comprise documentary evidence that such person holds the requisite certificate, diploma, licence, or document conferring the qualification, or attesting his possession of the skill or knowledge to which the same applies, and granted or issued by any person or body of persons for the time being recognised by us as competent to confer such qualification, or to test such skill or knowledge. Such proof shall also comprise such further evidence as we may in any particular case require.

All such documentary evidence as is hereinbefore mentioned shall be furnished by such person to the local authority by whom he is appointed, and shall be transmitted to us by the local authority when applying for our approval of the appointment:

Provided that nothing in this regulation contained shall, in the case of any person who was appointed to the office of public analyst with our approval, between the First day of January, one thousand eight hundred and ninety-one, and the date hereof, or of any person who is so appointed for the first time after such last-mentioned date, apply upon any subsequent appointment of such person to the said office.

This regulation has been sent to all local authorities who by Section 3, Subsection 1, of the 1899 Act are required to appoint a public analyst, and already there is evidence that the local authorities are awakening to the necessities of the case. In the letter addressed to these authorities by the Local Government Board, it is stated that the Board will accept as sufficient documentary evidence the diploma of fellowship or associateship of the Institute of Chemistry of Great Britain and Ireland, together with the certificate granted by the Institute after an examination conducted by them, on lines approved by the Board, in therapeutics, pharmacology, and microscopy. At present the Board also recognises the diploma of a registered medical practitioner as proof of competency in microscopy and therapeutics, and if a medical practitioner is appointed as a public analyst he is also required to furnish evidence of competent skill in and knowledge of analytical chemistry; but to guard against mere personal opinion in such matters it is stipulated that evidence of skill or knowledge on the part of a candidate must be from a person recognised as entitled to speak with authority as to proficiency in the particular qualification in question.

The foregoing practically means that henceforth the A.I.C. and F.I.C. certificates, *plus* the "post-graduate" examination of the Institute, will be the qualification for the appointment of public analyst, although a medical diploma, or, indeed, any other qualification in analytical chemistry, therapeutics, and microscopy may be accepted. It is to be regretted that the Pharmaceutical Society has not had its Major certificate recognised in some way, although by law it is not allowed to cover therapeutics. It will be observed that those gentlemen who were public analysts between 1891 and 1900 are exempt from the regulation altogether, so that they may be appointed to fresh positions without producing the documentary evidence that their less fortunate *confrères* must be prepared to give. It is also a curious circumstance that the public-analyst section of the Institute of Chemistry opposed the Institute's post-graduate examination. The irony of fate now makes the examination as essential as the F.I.C. itself, but we owe that to Dr. Thomas Stevenson who is close to the ear of the Local Government Board.

Golden Syrup.

CHEMISTS and druggists are not particularly interested in the campaign which has been carried on by the Sale of Food and Drugs Acts authorities against the sale of mixtures of

glucose-syrup and treacle as "golden syrup," but a pharmaceutical aspect has been given to the matter in an appeal-case heard by the Liverpool Recorder last week. The appeal was against a conviction by the Stipendiary Magistrate of a retailer who sold a 2-lb. tin of syrup labelled "Golden Syrup," with a wrapper bearing the words "Superfine Golden Syrup." The City Analyst and the Somerset House chemists agreed that it contained over 70 per cent. of glucose-syrup. The syrup had been manufactured by Messrs. Macfie & Sons, of Liverpool, and two members of that firm appeared as witnesses for the appellant. The witnesses for the prosecution were Mr. W. C. Williams, one of the public analysts for Liverpool, and Mr. Siegmund Stein, a sugar-expert. Mr. Stein, in the course of his evidence, remarked that the practice of mixing glucose-syrup with treacle came from America, and he was asked by Mr. Scott (for the appellant):

What is the definition of treacle in the British Pharmacopœia?

Witness: I have studied the definitions in the various Pharmacopœias, and find that they do not correspond with the fact. (Laughter.)

Mr. Scott: Is the definition of treacle in the British Pharmacopœia exactly the same as your definition of golden syrup—the uncrystallised residue of the refining of cane-sugar?

The Recorder: But the golden syrup itself is refined by filtration.

Witness: Exactly. He then proceeded to say that when the centrifugal system of manufacture came into use, between 1850 and 1860, the words "golden syrup" came to be used as meaning the lighter forms of treacle.

This witness's evidence and that of Mr. Scott Macfie and Colonel William Macfie, C.B., brought out some little known points regarding the origin of golden syrup, which we think are of interest to dispensers. It appears that the term "golden syrup" was invented in 1840 by the grandfather of Mr. Scott Macfie. At that time there was no syrup on the market but what was made from treacle-syrup, which was prepared with exceptional care, the black colour and much of the alkaline salts being removed by filtration. The introduction of the centrifugal process of freeing crystallised sugar from the amorphous treacle yielded a syrup which was found to grain—that is, to crystallise; consequently, manufacturers were glad to avail themselves of the glucose-syrup idea, as an addition of 20 per cent. of that syrup suffices to prevent the objectionable graining. The public appear to have relished the change, and gradually the quantity of glucose-syrup added increased, until five years ago practically all the pale golden syrups in the market contained from 40 to 80 per cent. of the glucose product, and two years ago, when the prosecutions began, two-thirds of the golden syrup sold was of the pale kind and one-third the dark. One great advantage of the glucose stuff from the manufacturer's point of view is that it enables him to use up the dark treacle with comparatively little trouble—in fact, the treacle has been used in many cases as a colouring for the colourless glucose-syrup. Counsel for the appellant made the most of the 1885 Pharmacopœia error—if error it can be called—in giving the description of "golden syrup" to the article *theriaca* or "treacle." Presumably, the Pharmacopœia authorities in removing that substance from the Pharmacopœia were aware that the golden syrup on the market was a mixture of treacle and glucose-syrup, and, very properly, they have permitted syrup of glucose to take its place. Treacle is still a commercial article, but nowadays it contains enormously-enhanced proportions of potash-salts owing to so much beet being used in sugar-making. These potash-salts include carbonate, and that is one reason why treacle is so good a pill-excipient.

THE COUNCIL ELECTION.

We have been receiving letters on the Pharmaceutical Council election daily this week, and cannot find room for all we have received. We do not say this in way of apology so much as to observe that the latters are (1) perfectly spontaneous, (2) come from the rank and file in (3) different parts of the country, and (4) they are unanimous in expressing discontent with the present Council. There is no doubt that the time is opportune for an attempt to infuse new blood into the Council, and the electors are to have the opportunity, for we hear of at least eight nominations of members who have never been on the Council before—viz., Messrs. A. Cooper (Kensington), W. Gibbons (Manchester), R. L. Gifford (Blackburn), C. Kerr (Dundee), C. E. Pickering (London), James Reid (Dumfries), John Taylor (Bolton), and A. C. Wootton (London). There are doubtless others, as well as the retiring members of Council, and all the nominees have until March 31 to decide whether they will go to the poll or not.

THE PARIS EXHIBITION.

We have had an opportunity of a conversation with Mr. D. Croal Thomson, editor of the *Art Journal*, who has just returned from a visit to the Paris Exhibition. Mr. Thomson has had special facilities for thoroughly inspecting the Exhibition, and he informs us that it is in a very forward state, and there is no reason, he considers, why at least three-fourths of the Exhibition should not be ready by April 14. Mr. Thomson is charmed with the arrangements on this occasion. The entrance to the Exhibition is in the Place de la Concorde, and on entering the two fine palaces of art attract attention. Crossing the Alexander III. bridge, visitors will face a street of buildings devoted to general exhibits, and on the right extending up the Seine is the Street of Nations, which Mr. Thomson describes as one of the most striking ideas that he has ever seen. Here the principal nations of the world, exclusive of Russia and France, have each erected a building typical of the architecture of its country. From this part of the Exhibition the sliding railway, consisting of three parts—one travelling at the rate of four miles an hour, the second eight, and the third twelve miles—will convey visitors to the Champ de Mars. As our Paris correspondent points out this week, the exhibits are not arranged according to countries, but according to their nature. For example, all the chemical exhibits will be grouped together in one building, the French alongside the German, the British alongside the American, and so on. It is a special feature of the Exhibition that the progress of the century is illustrated in every instance. The organisers of the Exhibition are responsible for this; they have, in connection with the present-day exhibits by firms from all parts of the world, arranged a collection which will show visitors the development during the century. The Trocadero annexe promises to be very attractive, the largest building on it (apart from the permanent one) being a huge and striking Muscovite structure for Siberia erected by the Russian Government. Mr. Thomson is enthusiastic in his appreciation of the artistic tone of the Exhibition. The buildings, he says, are magnificent, and the whole Exhibition will be a triumph of iron and electricity. One of the most striking spectacles will be the Château d'Eau, the front of which is an immense cascade which flows over strata that permit illumination by electricity. The success of the Exhibition appears to be ensured, because it is so much ahead of any previous International Exhibition.

ALUM BAKING-POWDER.

It is regrettable that the cases taken under the extended definition of the word "food" in the Sale of Food and Drugs Act in respect to alum baking-powder are not better defended. It has already been proved by experts that alum

in baking-powder cannot be regarded as injurious to health, considering the fact that when it interacts with sodium bicarbonate the alum is entirely changed into aluminium hydroxide—a perfectly harmless earthy substance. The use of alum by itself as an addition to bread is well known to have originated in the desire to whiten bread made from inferior flour, and its presence in bread would undoubtedly be injurious. It is different with alum in baking-powder, and the other side deserves a hearing before it is finally established that such powders are injurious, for it may with equal reason be urged that acid sulphate of potash and the acid phosphates, which are now so commonly used in place of tartaric acid for the manufacture of baking-powder, are injurious.

LINSEED MEAL.

Last week and this week we have reported four cases under the Sale of Food and Drugs Act in which retailers in Ireland have been fined for selling ground linseed cake as "linseed meal." The Magistrates appear not to have been informed that "linseed meal" is no longer an official medicine. In the 1857 Pharmacopœia ground linseed cake was "linseed meal"; in the 1885 edition crushed linseed took its place, and the title was retained, but now "linum contusum" is "crushed linseed," and the inference is that the ground cake is still "linseed meal."

BERLIN ACADEMY OF SCIENCES.

The celebration of the two-hundredth anniversary of the establishment of the Royal Academy of Sciences at Berlin commenced on Monday. The Academy was founded on June 11, 1700, on the initiative of Queen Sophia Charlotte, who brought Leibnitz to Berlin and managed to persuade Frederick I. (of Prussia) that such an institution would be of practical value in improving the national finances and developing industry and commerce. Berlin University was not founded till 1810, by which date the Academy, having been raised to the rank of a Royal Academy by Frederick the Great, was in a prosperous condition. The bi-centenary celebration began with a reception by the Emperor in the White Hall of the Royal Castle. The Emperor, on his throne, was surrounded by the insignia of Empire, the crown, sceptre, sword, orb, and seal, which were brought in on cushions of gold and silver cloth by the State Ministers. Picturesquely arranged on an adjoining table were piles of books, globes, and scientific instruments surmounted by an eagle carrying a twig of laurel. The Emperor announced in his speech that he intended to add to the class of philosophy and history chairs devoted to German philological research. The physical and mathematical side of the Academy is also to be extended so as to include the technical sciences. Lord Kelvin and Professor Max Müller have been elected foreign members, and Sir John Burdon-Sanderson, Professor Kenyon, Professor Mahaffy (Dublin), Dr. A. S. Murray, Mr. F. L. Griffith, and Professor F. W. Maitland, corresponding members. Membership of the Academy being very limited, it is considered a great honour to be connected with the Academy as a foreign or corresponding member. At a subsequent meeting on Tuesday representatives of foreign academies and learned societies presented addresses of congratulation, among them being Dr. T. E. Thorpe and Professor Ramsay for the Royal Society, Professors Atkinson and Mahaffy for the Royal Irish Academy, and Drs. Burgess and Traquair for the Royal Society, Edinburgh.

EVIDENCE WANTED.

Some chemists in London have cause to remember a gentleman who goes by the name of Islip (not Mr. C. C. Islip, Messrs. Warrick Brothers' representative) but J. Islip. Early last year we printed facsimiles of orders which he had been sending to chemists for various goods. The gentleman

is now under arrest and will be shortly brought up for trial on a charge of obtaining goods by fraudulent pretences. He has gone by various names—at present he is J. Cowper and his last address was 74 Finboro' Road, Kensington. Previously he was J. Islip and J. Louis, and his address then was 3 Trafalgar Square, Chelsea. Any of our subscribers who have had dealings with the man should communicate with Local-inspector Hayter, "B" Division, Chelsea, S.W.

MR. BOOT ON BRANCH-SHOPS.

The fencing between Mr. Jesse Boot and our Bloomsbury contemporary is becoming keener than ever. In the Nottingham papers of last Saturday this announcement appeared:—

Boots, CASH-CHEMISTS.—Every branch under the management of a chemist qualified by examination of the Pharmaceutical Society.

By thus employing a qualified manager at every branch, the Company ensures safety to the public to a degree that is not attained in the case of many shops belonging to private chemists.

The *Pharmaceutical Journal* of March 17, 1900, says:—"The President of the Board of Trade insists that in many cases the public has less protection in the case of individual chemists who carry on branch-shops, than they would have in the case of company-pharmacies conducted by legally-qualified persons. . . . The position of affairs is thus an extremely serious one."

So say we. It is a distinct danger to the public that private chemists should be allowed to carry on branch-shops without their being in charge of a qualified manager.

The public would, therefore, be safest in dealing at our shops, where they know a qualified man is in charge at each shop.

That is a nasty one, but we would like to know on what authority the Editor for the Pharmaceutical Society has made so grievous a statement. We know that Mr. Boot some time ago put this argument before the President of the Board of Trade, and it may be that Mr. Ritchie put it to the President of the Pharmaceutical Society, but the latter president ought to have had his answer ready—viz., that it is as much the rule with chemists as it is with companies, to put qualified assistants in charge of branch-shops.

THE RED CROSS.

Truth this week, in defence of Mr. Edward B. Kendall, pharmaceutical chemist, Coney Street, York, rather sharply raps the knuckles of Colonel Saunders, R.A.M.C., Mr. Kendall has shown upon the doorpost of his shop for some years past a red cross sign on a white disc. To this nobody thought it necessary to take the slightest exception, although amongst the pharmacist's customers were the General Commanding the York district, and most of the officers of the garrison. With the advent of Col. Saunders, P.M.O., however, hostilities commenced, that officer writing what *Truth* describes as "a distinctly impertinent letter" to Mr. Kendall referring to the sacredness of the Geneva Cross, and objecting to it being "prostituted for trade purposes," thinking it small wonder that ignorant Boers should go a step further in its degradation when the British public so abuse the emblem. This letter being ignored, a further communication from the same source was received by Mr. Kendall—this time written on War Office note-paper, and the gallant Colonel took pains to register it—stating that in consequence of the cross not being removed from the doorpost he (the Colonel) was now writing to the Pharmaceutical Society and the Red Cross Society to bring such "flagrant conduct" to their notice. Mr. Kendall with all fairness observes that if he has infringed anybody's rights or trade-mark he is prepared to do whatever is proper, but he questions the right of Col. Saunders to interfere in the matter, least of all through the medium of the War Office note-paper. The Colonel has stated his intention of pursuing the matter, but we should not be surprised as the matter now stands if he were requested officially to discreetly retire after the somewhat fruitless reconnaissance in which he has been engaged.

Westminster Wisdom.

The Companies Bill was on the orders on March 19, and was put back to March 22.

VETERINARY SURGEONS BILL.

Sir T. Gibson Carmichael, Dr. Farquharson, Lord Dalkeith, Mr. Tennant, and Mr. Charles Douglas got permission on March 15 to introduce a Bill to amend the Veterinary Surgeons Act, 1881. The Bill is not formidable, but is disciplinary, as it purports making the holders of the veterinary certificate of the Highland and Agricultural Society of Scotland subject to the Royal College of Veterinary Surgeons in the same manner as members of the College. Section 6 of the 1881 Act gives the Council of the College power to remove a name if it has been fraudulently put on the register, or if the person has been convicted of an offence amounting to misdemeanour or is shown to be guilty "of any conduct disgraceful to him in a professional respect." That is the power which the Scotch promoters of the Bill wish the Highland men to be subject to.

The same evening Mr. Ure brought in his

PETROLEUM BILL,

which is also backed by Mr. J. A. Pease, Sir T. Gibson Carmichael, Colonel Denny, Mr. Compton Rickett, Mr. Cross, Mr. Reckitt, Mr. McKillop, Mr. Tully, Mr. John Burns, and Mr. Trevelyan. It consists of three brief clauses, whose purport is to raise the flash-point by removing certain parts of the 1879 Act, but the memorandum which precedes the Bill explains it fully. It reads as follows:—

The object of this Bill is to give legislative effect to the intentions of Parliament as expressed in the Petroleum Act, 1871. That Act placed legislative restrictions on the sale, keeping, and carriage of petroleum with a flash-point under 100° F. The flash-point of petroleum is the lowest temperature at which it begins to give off inflammable vapours. The Act of 1871 prescribed a test, known as the *open test*, by which the flash-point was to be determined. That test was, subsequent to the date of the 1871 Act, found to be fallacious. Unless it was applied with extreme care and scientific accuracy the *open test* was found to be incorrect to the extent of approximately 27°. In other words, if the flash-point of any particular oil was in reality 73° F., the *open test*, as usually applied, showed its flash-point to be 100°. To correct the errors incident to the use of the *open test*, the *close test* was devised by Sir Frederick Abel. The *close test* was made compulsory and the *open test* was abolished by the Act of 1879. But by that Act the restrictive legislation prescribed by the Act of 1871 with regard to petroleum with a flash-point under 100° F. was applied to petroleum with a flash-point under 73° F. All petroleum with a flash-point above 73° F. was thus, contrary to the 1871 Act, freed from legislative restrictions. The purpose of this Bill is to substitute the accurate or *close test* for the inaccurate or *open test* in the Act of 1871, and to restore the 100° flash-point prescribed by that Act.

Another innocent-looking little measure is the

SHOP HOURS BILL,

brought in by Mr. Provand, Mr. Samuel Smith, and Mr. Seton-Kerr on March 7, and since printed. It extends the 1892 Act to women, reduces the hours per week to sixty-eight, and fixes a maximum working-day. Clause 1 (there are only two) is as follows:—

1. The Shop Hours Act, 1892, shall be amended and extended as follows:—

- (1) That the Act shall extend and apply to all women.
- (2) No woman or young person shall be employed in or about a shop, or as a messenger or otherwise in connection with the work of a shop, for a longer period than *sixty-eight hours*, including meal-times, in any one week; or for a longer period than *fourteen hours*, including meal-times, in any one day.

WHEN IS EASTER?

The question has been vexing many people during the past ten days. Mr. Richardson (the member for Durham) was so interested in it that he asked the Attorney-General on March 14

whether he was aware that, under section 3 and relative schedule of 24 George II., c. 23, Easter Day was the first Sunday after the

full moon which happened upon or next after March 21, and, if the full moon happened upon a Sunday, Easter Day was the Sunday after; and that the first full moon which happened next after March 21 this year was on Sunday, April 15, at 12 A.M., and that Easter Day should therefore apparently fall on April 22, and not on April 15, as given in the calendar; and whether, having regard to the possibility of doubt arising as to when bills falling due on a day dependent on the date of Easter were legally payable, he would introduce a short Bill to make April 15 Easter Day this year in law as well as in the calendar.

The Attorney-General, in reply, said:—The third section of the statute referred to enacts that Easter shall be observed according to these tables and rules annexed to the statute. One of the tables provides that the paschal full moon in the year 1900 falls on April 14, and that the feast of Easter falls on the 15th. The fact is that the full moon referred to in the statute is not the actual full moon—(much laughter)—nor the mean full moon—(renewed laughter)—but a fictitious or statutory full moon, sometimes called the ecclesiastical full moon. (Renewed laughter.) As there is no possibility of doubt upon the question, it is not proposed to introduce any legislation respecting it. It may interest the House to know, added the Attorney-General, that attention was called to a similar occurrence in the years 1818 and 1845, and some learned papers were written upon the subject, to which I shall be glad to refer the hon. member. (Laughter.) Perhaps I may be allowed to point out that some arrangement of the kind was necessary, as otherwise Easter might fall on different days in different parts of the United Kingdom, which would not promote unity—(laughter)—and as a learned writer, speaking of the subject, said, "The Church cares more for peace and concord than for the equinox or the moon." (Cheers and laughter.)

PRODUCE CONTRACT-NOTES.

The Chancellor of the Exchequer received a deputation from Manchester on Saturday, March 17, in regard to the proposed stamp-duty on brokers' produce contract-notes. Cotton interests were mainly represented on this occasion, and it was submitted that the proposed tax would represent 5 to 10 per cent. of the income of the commission-agents. The Chancellor promised to fairly and very fully consider the whole matter.

In the House of Commons on Monday evening, Sir W. Houldsworth (member for the North-Western Division of Manchester) asked the Chancellor whether he proposed to make any change in that part of the Finance Bill which referred to the stamps on brokers' bills.

The Chancellor of the Exchequer replied: As my hon. friend is aware, I have received several deputations on this subject, and they undoubtedly have brought before me matters with which I was not previously acquainted. I do not think it would be right in view of the considerations which have been laid before me to press the clause in its present form. (Hear, hear.) I shall further consider the matter before committee, in order that I may, if necessary, place a clause on the paper. (Hear, hear.)

We understand that the Chancellor of the Exchequer desires to limit the tax to dealing in "futures." That apparently was his first intention, but he seems to have been unaware of the real incidence of the tax when he proposed it.

ARMY AND CIVILIAN SURGEONS.

In Committee of Supply of the House of Commons on March 16, on the adjourned debate on the vote of £55,000/- for medical establishments, Dr. Farquharson paid a high tribute to the Army Medical Department for the pluck, devotion, and skill displayed by its members in the war in South Africa. He urged an increase in the number of surgeons, deprecating the hand-to-mouth system of employing civilians, and the "meagre pittance" paid to men of the Service who had to go through six years of expensive and laborious preparation. Sir W. Foster also regretted that a larger increase of the corps was not proposed. The War Office might have spent the money in that direction instead of expending it in lavish generosity to civilian surgeons who had gone to the front. It was quite right to send Sir W. MacCormac and Mr. Treves, who had done excellent service; but he believed when one of these distinguished surgeons asked for an assistant the War Office rated the assistant on an equality with his principal, and paid him on the scale of £5,000/- a year. Mr. George Wyndham, in reply, said he was sorry to hear the insinuation that the services of the five consulting surgeons (other than Sir Wm. MacCormac and Mr. Treves) had been too generously recognised. A surgeon

of the standing which these gentlemen had achieved who went out to South Africa did not only risk his life, but he made a great financial sacrifice. His income was to be told in thousands; and to proceed to South Africa, with the possibility of not returning for five, six, or seven months, was really, in addition to the personal sacrifice, to make a present of 5,000/- or 6,000/-, or perhaps 10,000/-, to the taxpayers of the country. He did not think that 5,000/- a year was a shilling too much to pay for the services that such gentlemen had rendered. (Hear, hear.) They were asked to offer such inducements to the Royal Army Medical Corps as would enable them to obtain the heads of the medical profession. They hoped in time to improve the conditions of this branch of the Service so as to obtain the best material within their reach.

The Companies Bill.

Powder and Shot.

WE continue to receive letters from subscribers who have addressed their Members of Parliament as we have advised, and, to use the words of Mr. E. Wilkinson, Hon. Secretary of the Halifax Chemists' Association, "In all cases the circulars addressed to the Members have been favourably received and acknowledged. The following are selections from some of the letters:—

The printed enclosure which you forward appears to me to make out a good *prima facie* case for amendment of the clause in the Company Bill to which it relates.

* * * * *

I shall be happy to give attention to the clause in the Companies Bill affecting the interests of pharmacy, but I understand that there is no prospect of it becoming law.

* * * * *

I have read your letter and the accompanying paper. Your complaint of the effect of the Companies Bill upon chemists seems quite reasonable, and the Bill should be amended in this respect. I will carefully bear the point in mind.

* * * * *

There seems to be no doubt that properly qualified chemists will not receive fair treatment if the clause in question is passed as it stands, and, so far as I am able to judge without hearing the other side, if any amendment is proposed it will probably have my support.

* * * * *

My own impression is that the Companies Bill will not come up for discussion till much later in the session, and its ultimate passing into law is doubtful. As regards the clause to which you call my attention, I have no hesitation in saying that there seems to me to be considerable force in your objections, and I am sure that it will not pass without considerable discussion and satisfactory assurances from those in charge of the measure.

* * * * *

Mr. Ritchie tells me that the clauses to which you object in the Companies Bill have really nothing to do with it, and that if they are objected to in Committee, so far as the Government are concerned, they have no objection to their being taken out. I am not on the Committee myself, but when it comes before them I will see if I can get somebody to take this step, as what you state does appear objectionable.

* * * * *

I can foresee considerable difficulties in your way should the Government seriously press the Bill. The subject has been a somewhat familiar one to me for years, as I have had on frequent occasions professionally to advise the Pharmaceutical Society. I suggest for your consideration whether it would not be well to concentrate your energies on such an amendment of the clause as would secure the presence of a duly-qualified chemist in each and every place of business where dispensing is conducted. The great point is the safety of the public, and without the amendment I refer to that would certainly be endangered.

One of these extracts is from a letter written by Mr. Shaw, who was Solicitor-General for Scotland in the last Liberal administration.

DENTISTS AND THE BILL.

The *British Dental Journal* appears to be working vigorously to get Clause 3 of the Bill retained. Dentists find Clause 2 a distinct stumbling-block to their movement

to have the practice of dentistry by limited companies declared to be illegal. The *B.D.J.* says:—

If chemist's departments are allowed, it is simply for the same reason that quacks are allowed in other professions—because they have not yet been legislated against. Chemist's departments are opposed by the whole of the chemists of England; and legislation on this point is being agitated for, daily and weekly, by the Pharmaceutical Society.

We admire the simple faith in the Society, or rather Council, which the *Journal* exhibits.

HANDS ACROSS THE SEA.

From Washington, D.C., we received a postcard on Tuesday, which says:—"Allow me to congratulate you on your stand on the Companies Bill. You are right. Go ahead."

THE LINLITHGOW MEMBERS

have responded to the petition which Mr. Alex. Spence, the Local Secretary, sent up to them (last issue, page 473). Mr. John Wilson, M.P., for the Falkirk Burghs, says:—

Any such representation so largely and influentially signed should have due consideration, and you may depend upon my attention to the same.

Sir H. Campbell-Bannerman is non-committal, and merely remarks:—"I will give my best attention to the matter when it comes to be dealt with."

NOTTINGHAM CHEMISTS AND THE BILL.

Nottingham chemists contemplate arranging a meeting to discuss Clause 2 of the Companies Bill. The general feeling is that the Pharmaceutical Council is acting wisely in opposing Clause 2, but that it should go further—that, indeed, it should follow a constructive policy as well as a destructive one. However, ere this many local chemists have sent the *C. & D.* circulars to their representative, others either A. or B. of the Federation circulars, and now they are to still further supplement them. "Why, oh why," local chemists are asking, "is the Pharmaceutical Council always so slow in its movements? Have not some of the Council become too lethargic, and begun to show signs of senile decay?" There is a very angry feeling arising, and no doubt if Mr. Glyn-Jones comes out with some "young blood" he will receive much support from Nottingham and district.

ON ANOTHER ISSUE.

Are the swindlers to escape exposure because they call themselves a limited liability company? The War Office answer is in the affirmative, but it is not an answer that will commend itself to men of probity or of intelligence. It is, however, a very convenient answer for the fraudulent contractor and for the people at the War Office who are so ready to screen him. He has only to register himself as a limited-liability company in order to escape the only penalty that he really fears.—*The Times* March 21, 1900.

The above is written in reference to the discussion in the House of Commons on Tuesday evening in regard to the fraudulent Army-contractors. It fits in so well with company-pharmacy that we ask our subscribers to mark the paragraph, and bring it under the notice of their M.P.'s when a suitable opportunity arises.

AMERICAN QUACK MEDICINES.

The invasion within recent years of the American patent-medicine man and his wares into this country supplies a writer to the *Manchester City News* with a congenial theme. He traces the advent of various American specialities into this country, and dilates upon the success which has followed their original advertising-methods, and the old story of the gullibility of the British public and more particularly of the masses. The article concludes with a righteous denunciation of what he considers the prostitution of the pages of newspapers in this country by the insertion of advertisements for these remedies, so skilfully conceived that they are often mistaken for genuine news.

Winter Session.

Notices of meetings to be held are inserted under "Coming Events." If meetings are not attended by reporters, secretaries of associations would oblige by communicating with the Editor.

Society of Arts.

AT a meeting held on March 21 at the Society of Arts, John Street, Adelphi, W.C., Mr. Otto Hehner in the chair, Dr. S. RIDEAL read a paper on

THE USE AND ABUSE OF PRESERVATIVES IN FOOD.

The lecturer began with an interesting *résumé* of the antiquity of the use of antiseptics for preserving food, and then proceeded to pass in review the various antiseptics in use at the present day. In salting pork a mixture of 2 lbs. of salt, 2 oz. of saltpetre, and $1\frac{1}{2}$ oz. of moist sugar was used for the dry process; or if a brine were employed, as in wet salting, 4 lbs. of salt, $\frac{1}{2}$ to 1 lb. of sugar, and 2 oz. of saltpetre to 2 gals. of water. Sometimes potassium bicarbonate and creosote were added. By these methods he had found that the meat absorbed 4.27 per cent. of salt and 0.0083 per cent. of nitre. The sterility of aerated waters was due to the carbonic-acid gas used in their manufacture, but that gas was not generally effective in the case of milk or meat. Carbon-bisulphide and hydrogen-peroxide were also preservatives. Dilute hydrochloric acid and phosphoric acid had been used, and sulphur-dioxide seemed to have been used for sulphuring casks from very remote times. Sulphites were much used in beer, he had found them in several well-known kinds, but this preservative had so far not been much noticed by the Departmental Committee on Food-preservatives. Salicylic acid was largely used in temperance-drinks and British wines. Benzoic acid was employed in the Pharmacopœia for preserving lard, and its use in food had less physiological effect than salicylic acid. Fluorides possessed considerable antiseptic properties. The use of sodium silico-fluoride under the name of salufer was advocated many years ago by Thompson. Glycerin was largely used in wines, temperance-drinks, and beef-juice preparations; it was, however, only a preservative in strong solutions.

The lecturer then referred to experiments he was making in contrasting the employment of molecular proportions of antiseptics, which he thought was the better way of comparing the retardation effect on the putrefactive organisms of the different preservatives. The knowledge of the preservative action of boric acid and the borates was modern, and was first employed with the addition of alum which prevented blackening of the meat, an object which was now attained by mixing borax with the boracic acid. Many plants contained small quantities of boric acid, but the experiments recording these results needed checking in view of the fact that pure caustic potash and soda had since been shown to contain boric acid. A quantity of 4 gr. of the boric-acid mixture was sufficient to keep milk sweet for twenty-four hours, whilst 1 in 50,000 of formaldehyde answered the same object. Experimental work had shown that the slight retarding effect on digestion exerted by boric acid was only comparable to that exerted by claret, tea, and Worcester sauce, and, in fact, had less effect. The lecturer ended by reference to Dr. Annett's experiments with kittens, showing that cow's milk was quite unsuitable for very young kittens, as he had proved by experiments.

DISCUSSION.

Dr. ATTFIELD thought the paper very valuable, and especially that portion of it which dealt with the investigation of the value of antiseptics in proportion to their molecular weights. In regard to what he preferred to call the unwise use of preservatives, his personal experience was that the quantities generally employed were excessive. When boric acid came under the notice of the Pharmacopœia Committee of the British Medical Council he ventured to lay his personal experience in the use of that substance before it, with the result that the dose recorded in the Pharmacopœia was reduced one-half. He (the speaker) had suffered from

dyspepsia for twenty years, and had tried, on the advice of physicians, most of the tonics and stimulants in the Pharmacopœia without much success. The consequence was that he was compelled to use small quantities of boric acid to prevent unnatural decomposition of food in the stomach. Four or five hours after a meal it was his custom to wash the remains of the meal out of the stomach to avoid exhausting effects on the stomach, and from an examination of hundreds of such washings he asserted that boric acid did not in the slightest degree retard natural digestive action. He hoped that if the Departmental Committee took any action in the matter of preservatives, it would be in the direction of compelling an indication of the amount present in the food in which it was used.

Dr. CASSEL did not quite know what was the object of the paper and Dr. Attfield's speech—Was it to apologise for the use of antiseptics? In his opinion the paper, whilst it might have value from an academic point of view, did not show that it was advisable to use preservatives in food. It seemed to him the lecturer had given his ease away by admitting that boric acid and such antiseptics possessed toxicity, as he (the speaker) held that toxic articles should not be allowed to be used in food. Such an addition was a wrong proceeding, quite unnecessary, and should be prohibited by law. Refrigeration was the proper method of preserving food, not the use of drugs and chemicals.

Dr. DUDFIELD said he was inclined to connect the increase in infantile mortality in summer with the use of preservatives in milk. The use of cleaner conditions of milking and carrying, combined with cold storage, would render the use of antiseptics unnecessary in the case of milk. He also spoke highly of the keeping properties of a sample of oxygenated milk that had been sent him.

Mr. STILLMAN reminded the meeting that smoked provisions, to which nobody had made any objections, were preserved with small quantities of formaldehyde generated from the wood used in the smoking process.

Mr. KERSLEY said large quantities of borax were given to quite young infants, in the form of borax and honey and borated teats in the treatment of thrush, without any ill results.

Mr. LLOYD HOWARD said that benzoic acid was one of the oldest preservatives, but its cost was twenty to thirty times that of boric acid. He thought, also, that there was a natural objection against the use of a substance which often came from artificial sources. Cold-storage of milk would not, it seemed to him, be practicable in the case of large cities and amongst the poor. Why was it that those active analysts only turned their attention to the newer preservatives, such as borax and boric acid? Was it because they were novel, and not sanctioned by long usage? Salt was an emetic and irritant poison in large doses, potassium nitrate was a drug of strong physiological action, and the products of smoke were more or less toxic; yet he had never heard that it was proposed to interfere with their use.

Mr. HEHNER said many aerated waters he had examined were loaded with germ life; it would not do to let it go forth that aerated waters, because of the carbonic acid they contained, were necessarily harmless. The statement that bacteria got tolerant of antiseptics in time was undoubtedly true, or else why was it that milk went sour at all after an antiseptic had been added? The explanation was that succeeding generations of bacteria got used to the antiseptic, and, so to speak, snapped their fingers at it. (Laughter.) It was not a good argument to say that boric acid was a natural constituent of many vegetable substances, and on the strength of that go and add more boric acid, because some might apply the argument in the case of arsenic, which could be found in most things. The difficulty was that the newer antiseptics did not show themselves as did salt or smoke, and hence they did not know whether they had been added or not. Dr. Attfield only took boric acid on the advice of the most eminent physicians, but would surely not allow his milkman and buttermilk to give him a dose at their discretion. All the states of Europe had legislated against the use of preservatives in food except England. In France it was true that the use of preservatives was permitted in exported food—(laughter)—but then Great Britain had set them the example of allowing tea to be sold abroad that was unfit for use in this country. (Laughter.)

Dr. RIDEAL, in reply, wished the discussion had taken the

form of discussing the limits of the quantities of preservatives to be used in food. There was not good evidence that borax caused infantile diarrhoea, and if, as was generally thought, that affection was due to a germ, he thought a trace of a preservative would have an inhibitive effect on the growth of the organism. It was now generally admitted that sterilised milk was not so digestible as milk which had not been heated. In regard to oxygenated milk there was still a chemical used, and he would remind the advocates of its use that, according to the patent under which it was made, the milk was subjected to heat with the object of sterilising it after the oxygen was used. Aerated waters, if made with contaminated water, became sterile in time by the action of the carbonic acid gas, but, of course, sterile water should always be used in their manufacture.

Chemical Society.

THE last meeting (March 15) was one of the most interesting of the session. The benches were as full as the programme, which was almost wholly devoted to inorganic work. First came Mr. BRERETON BAKER with another of his simple papers, the result of elaborate and painstaking work, on

MERCURY AND MERCUROUS CHLORIDE.

It was the vapour-densities of these substances in the dried state that Mr. Baker had been aiming at, but it takes a long time to dry either. However, he succeeded after many weeks' drying in specially-constructed apparatus, and the result of the vapour-density determination of mercurous chloride in a Victor Meyer apparatus with atmosphere of nitrogen justified the conclusion that the molecule is Hg_2Cl , at $448^{\circ} C.$, when the vapour-density 217·4 was obtained, whereas when moisture was present the density was found to be 118·4. This latter observation agrees with the author's previous observation that ammonium-chloride vapour does not dissociate unless in presence of water. The vapour-density of mercury was also determined at $448^{\circ} C.$ and found to be 108·1, so that at that temperature the metal appears to be monatomic.

In the course of the discussion Professor ARMSTRONG paid a high compliment to Mr. Baker for his painstaking research, and Professor DEWAR mentioned that Lord Rayleigh was using liquid air as a desiccator with great success. Mr. DAVID HOWARD, speaking from his experience as a manufacturer of mercurials, said that in the sublimation of large quantities of mercurous chloride the presence of vapour of water seemed to determine the corrosive action of the vapour on iron, and that the behaviour of the vapour of the chloride in the comparatively imperfect dryness obtainable on a large scale, suggested a true sublimation rather than dissociation.

PURE HYDROBROMIC ACID.

By Dr. A. Scott, F.R.S.

Amorphous phosphorus is unobtainable which does not contain arsenic, hence hydrobromic acid and bromides prepared from it get contaminated with arsenites and arsenates. Dr. Scott recommends the acid to be prepared by interaction between bromine and sulphurous acid, and distilling, adding a little barium bromide to the still before the final distillation. In this way pure acid is obtainable—equivalent 119·099. Stas's process gives the same, and Squibb's 119·102. A further outcome of this research was presented in a note on a

NEW SULPHIDE OF ARSENIC.

This is a beautiful dark-brown sulphide, As_3S , which is obtained from the brown liquor formed by treating amorphous phosphorus with nitric acid and then with sulphur dioxide. The latter reagent is reduced to hydrogen sulphide, which reacts with the arsenic that contaminates amorphous phosphorus. The new sulphide is insoluble in ammonia, colourless ammonium sulphide, and carbon bisulphide, but dissolves in yellow ammonium-sulphide solution.

The discussion was all about the peculiarities of sulphuretted hydrogen and arsenic reactions. Then Mr. R. L. TAYLOR told the meeting about the action of

IODINE ON ALKALIES.

He used decinormal solutions, and found that hypoiodite

and iodide are first formed, and that the former decomposes into iodate and iodide.

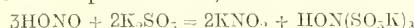
A rather animated discussion took place, but no new facts were brought out. Dr. DIVERS read a note on

THE INTERACTION BETWEEN SULPHITES AND NITRITES.

The interaction of a nitrite with sulphurous acid or sulphite is very simple. Nitrous acid, in the form of nitrous fumes, is entirely taken up by the solution of a pyrosulphite with the production of a two-thirds normal hydroximidosulphate, thus—



If the normal sulphite be used, the reaction is—



At this point our representative joined the majority which had gone up to the coffee-room, interest in the meeting having vanished.

Liverpool Chemists' Association.

At the meeting held at the Royal Institution on March 15, Mr. A. S. Buck presided over a good attendance of members.

Mr. THEO. H. WARDLEWORTH then gave a review of his recent

VISIT TO THE WESTERN HEMISPHERE, and, in the course of his remarks, said that when one entered a New York pharmacy it could be seen at once that it was a go-ahead place. The pharmacist was not afraid of adopting new ideas; he pushed his own specialities, or anybody else's so long as they paid him. The soda-water fountain was a conspicuous object, and it was the usual thing in the hot weather to go to a chemist's to get a "soft" drink.

Hot soda-water could be procured in the winter time, which was, he was told, "nothing but hot water." In the shop, while people were waiting for their prescriptions, provision existed for their entertainment in the shape of a table covered with the daily papers, and comfortable seats are put round the shop. Another feature of the chemist's shop was the sale of tobacco and cigars, and it was no uncommon thing to see a chemist prescribing his own brand of "Key west," "Pittsburgh stogies," or Cuban cigars of some kind or other. Large quantities of patents are sold. Prescribing was pretty much the same as here; assistants have to work long hours, and competition was very keen. In Canada the windows are dressed low down, so that the counter and the inside of the shop can be seen from the outside. Cigars were sold, and there were other things stocked not usually found in the pharmacy of an English chemist and druggist, otherwise the conditions were very similar to those which prevail here.

In the Jamaica shops the pharmacists go in largely for groceries, hams, tinned fruits, and tinned meats, while many do a large trade in wines. The tropical peasant is somewhat fastidious in regard to his medicine. He likes a big black bottle full. A writer in THE CHEMIST AND DRUGGIST recently gave a somewhat interesting account of a Trinidad medicine for the spring. In Jamaica and the other islands there exist bush-doctors, whose power over disease and "duppies" (ghosts) is held in great esteem by the populace.

Mr. Wardleworth then described a visit paid to a Chinaman's store to buy an opium-pipe, when, after the purchase had been successfully negotiated at half the price originally asked, the proprietor arranged to show him how the pipe was used, and entertained him to tea, the beverage being without sugar or milk, and very fine in flavour. The method by which the coolies smoke hasheesh was then illustrated. An intelligent Afghan told him that the bhang was always prepared from the leaves of the male plant, and used in the form of an infusion or sweetmeat, whilst only gunja from the female plant was used for smoking. The collection of aloes in Barbado has almost been abandoned, and it was with some difficulty that he had the opportunity of seeing any of the plants.

The Botanical Gardens in Jamaica were very fine, all the methods of cultivation used in the West Indies being employed. Mr. Fawcett showed him over the gardens, and explained the cultivation of bananas, cinchona, nutmegs, coffee, limes, dates, pimento, and a host of other things. An ingenious method of fertilising nutmeg-trees

was mentioned, by which the tender shoots of the female tree were grafted into the trees which did not bear fruit, and the plant became productive.

Cocoa-growing was a great industry, especially in Trinidad, and Mr. Fawcett gave him specimens which illustrated the usual size of the pod. On returning from Castleton Gardens, Mr. Fawcett stopped the buggy and drew Mr. Wardleworth's attention to a trailing-plant which was growing by the roadside, and said if he cared to gather cowpeas he could do so. The pods were secured and deposited in the buggy. It was curious to hear travellers, mostly negroes, they met on the road cautioning them in their own language to be "berry careful," and giving mimic representations of the result of cowpeas touching the skin. The peasants have a great dread of cowpeas, and will not clear ground on which it is growing; they prefer to burn the "bush."

Mr. Wardleworth exhibited some Chinese chopsticks, a Buck Indian dove-call, cunningly made from two hollow beans, and tonka-bean pods from Venezuela, and was sorry that pressure of business prevented him from giving more than the briefest outline of his impressions of an exceedingly interesting trip.

A discussion followed, in which Dr. NEVINS, Messrs. BUCK, WYATT, COWLEY, and MARDEN took part.

Western Chemists' Association.

AT the Westbourne Restaurant, on March 21, about two dozen members were present when the President (Mr. J. F. Harrington) called the meeting to order. The CHAIRMAN first invited Mr. A. Chater, of Brisbane, to address them on

RECIPROCITY.

MR. CHATER said that his fellow-colonials desired reciprocity of diplomas between the Pharmaceutical Society at home and the societies of the Colonies. He considered the present an opportune time for the parent Society to take the initiative in this matter. He understood that the Society had no power to do this, and it seemed a strange thing to colonials that a mother should have no power to reciprocate with her children. He urged that it was high time such power was obtained. Had not they been good, dutiful children, and been at least some use in South Africa? And as they had done in war, so would they do in pharmacy; they would strengthen the hands of the parent Society, and benefit the entire English-speaking race. In Australia they had felt rather modest about pressing their claims on this subject, as they thought the British Society should have mooted the subject first. As a matter of fact, Great Britain would have more to gain by the arrangement than the Colonies, for, while only a few colonial pharmacists come to England to settle, many British pharmacists emigrate to the colonies. If the British Society took the initiative, a sufficient standard of examination would soon be fixed. Unfortunately they in Australia had not yet fully reciprocated amongst themselves but Great Britain's movement would help to clear away all these difficulties. Federal government was almost an accomplished fact. In Australia they felt they wanted to be united; and he thought, by their influence with agents-general, they might be of use in influencing the Government in some measure and strengthening the hands of the pharmacists of the English-speaking world.

The CHAIRMAN having said a few words in commendation of the scheme,

MR. PARKER thought reciprocity was highly desirable. There would undoubtedly be many practical difficulties. For instance, they would first require to reciprocate with Ireland, and they would have to be satisfied that the examination in Dublin was of equal standard to those in Edinburgh and London. If they accepted a lower standard the value of their own examination would depreciate, but he was convinced that if reciprocity were agreed upon, their Irish friends would regulate their examinations in accordance with ours. That being so, reciprocity would be a valuable principle.

MR. ANDREWS was of like mind, and

MR. GLYN-JONES, who confessed that it was at his suggestion that Mr. Chater was present that evening, said the subject had been considered by the Pharmaceutical Council on several occasions with no useful result. He thought the

best point Mr. Chater had made was in the suggestion that it was time the British Society obtained power to reciprocate. Whether we were prepared to go in for reciprocity with all our colonies or not, he thought it was wise that the British Society should at least approach the authorities with a view to getting powers to reciprocate. He was also rather of Mr. Chater's opinion that it would be more to our interests than otherwise. The difficulty of reciprocating with Ireland should not interfere with their attempt to obtain the requisite powers. It would, of course, be disastrous if we were bound to accept any certificate, but if the examinations got to be of such a character that it would pay a man to go out to Australia to qualify and then return, there would be something very far wrong with the British examinations.

MR. MARTINDALE said reciprocity was a subject they all had at heart, but there were many difficulties in the way. It would be a good thing, especially if they all had such influence with their Governments as the Australians. But even the Australian colonies were divided amongst themselves, and would not reciprocate with each other. Then again the Pharmaceutical Society of Great Britain could not possibly accept all the qualifying-examinations, and there would be extreme difficulty in drawing the line. The British standard he believed to be below that of Brisbane, for there they have a compulsory curriculum. Before they could reciprocate with Ireland, the Irish qualification would have to be altered, as the pharmaceutical-chemist examination of Ireland was, he thought, much below their standard for that title. Special powers would have to be obtained before reciprocity could be granted, and these would have to be considered and brought forward when they had a Pharmacy Bill before Parliament. Furthermore, it was not for the Pharmaceutical Society of Great Britain to say definitely what they should do. The application should come from the other side, and they would be pleased to entertain any proposition put before them in an official way. The subject was well worthy of discussing and entertaining, and he promised Mr. Chater that they would approach the subject with an open mind, when it came within the purview of discussion.

MR. CHATER, being invited to reply, reminded Mr. Martindale that the question had been before the Pharmaceutical Council on four or five occasions, and he trusted that shortly the subject of reciprocity would come before all pharmacists, who as a body he was certain would go in for it. He did not suppose reciprocity with all British colonies would be granted, or was even desirable. All that he and his friends wanted to see was that the British Society had the will to reciprocate with those who had examinations equal to theirs. In Queensland they had had examinations for thirteen years, and now they had found it necessary to introduce a compulsory curriculum. The latter had been in vogue in Victoria for years. If the Pharmaceutical Society of Great Britain would only send out a deputation to inspect their schools and their examinations, he could assure them both of a hearty welcome and an end to their scruples.

This subject disposed of, Mr. HICK wanted to know if there was anything fresh to be said about

THE COMPANIES BILL.

They had no idea what the Council was doing in the matter, and they would like to get at it, if possible. After some hesitation,

MR. MARTINDALE said the Council had come to the conclusion to oppose Clause 2. Any other course would have a tendency to put limited-companies in a better position than before, as they would be able to say they were regulated by the Pharmaceutical Society. There was no unanimity of opinion on the question, either in the Council or in the trade. The Federation of Local Associations, by their action in putting forward alternative clauses, had created an absurdity. The great diversity of views was the principal trouble, and until they got a definite policy put forward he could see no other way by which they could keep limited companies out of the purview of the Pharmacy Act. In the interview which he and Mr. Carteighe had with Mr. Ritchie, the latter put it strongly before them that they were putting companies in a stronger position than they were at the present time, and they were trading under exactly the same conditions as registered pharmacists with branch shops. "This," said Mr. Martindale, "was a poser

to us, and was put so logically that it could hardly be answered."

Mr. MATHER was of opinion that the Pharmaceutical Council should have nailed their colours to the mast and gone on the question of title. Had they done so, they would have had a following amongst pharmacists which would have astonished them.

Mr. MARTINDALE wished it understood that he strongly advanced the claim for protection of titles to Mr. Ritchie, but he was obdurate on that point, and stated that there was a strong feeling in Parliament that the Pharmaceutical Society had failed in its duty of protecting the public as required by the Act. He (Mr. Martindale) contended, however, that they had always gone for unregistered managers in branch shops when cases were brought under their notice. They never moved, however, until they were moved. Greater support should be given to the Society on this point, as the opinion was undoubtedly prevalent that they did not manage their own affairs as well as they ought to.

Mr. MATHER reiterated his opinion that the Society did wrong in opposing Clause 2 without having a strong second card to fall back on, and

Mr. GLYN-JONES felt considerable sympathy with Mr. Martindale. They all envied the gentleman who occupied the Presidential chair of the Pharmaceutical Society; but he imagined, as some of his Poplar penny customers would say, "Taint all lavender." The President had told them that the Council had decided to leave matters where they were, and, as a loyal President should, he endorsed the Council's decision. But he (Mr. Glyn-Jones) was convinced that they had not heard what Mr. William Martindale would have done in the matter. He felt certain that Mr. Martindale *per se* would not have allowed such an opportunity to slip. He (Mr. Glyn-Jones) was of opinion that the Council could have made a strong case—could have negotiated successfully with Parliament, and have had many backers in the House of Commons. Even suppose nothing had been gained—which he was not disposed to admit—it would have done no harm, and would have educated M.P.s as to their claims. He then protested against quotations from reports of the interview between their President and the President of the Board of Trade being made use of by Boots (Limited) to give the public the idea that chemists were conducting their businesses in an irregular manner. He saw nothing in Mr. Ritchie's *tu quoque* argument, and his answer would have been a request for Mr. Ritchie to bring forward any cases of unqualified practice, and if the Society failed to prosecute, then would be time enough for condemnation. This practice lately adopted by their enemies was sharp and not too honourable. Reverting to the action of the Council, he thought it no excuse that members were divided, and that they had not put forward a definite policy. He considered that it was the duty of the Pharmaceutical Society to frame and form opinion, and not wait for the trade to do it for them. If members of the Council were not qualified to grasp and put before the trade the proper way to do things, he failed to see what use they were. As to unanimity, it was not necessary. There was such a thing as government by majority. If they waited until the Council or the whole trade became unanimous, they would have to wait until the majority of members present were out of business.

Mr. PARKER having spoken.

Mr. ROGERS inquired whether the Association was prepared to discuss the dispensing of proprietary articles, a subject which he agreed to bring up at the next meeting, when it was promised full discussion.

A few remarks from the CHAIRMAN closed the proceedings.

Bolton Pharmaceutical Society.

A MEETING was held on March 19, for the purpose of considering the Companies Bill (Clause 2). There was a very large attendance, and it was decided that the following resolution be sent to the Pharmaceutical Society:

Proposed that the Pharmaceutical Society should be asked to oppose Clause 2 of the Companies Bill, and use their best endeavours to see that this is done.

A deputation was also formed for the purpose of evoking

the sympathy of the members of Parliament with the cause.

It was further resolved that the members present should use their influence in support of the candidature of Messrs. Taylor (Bolton) and R. L. Gifford (Blackburn) at the forthcoming election of the Pharmaceutical Council.

Various other matters came under discussion, and it was decided to hold another meeting on April 24, to receive reports of deputations.

Derby and District Chemists' Association.

A SPECIALLY-CONVENED MEETING was held at Smith's Restaurant, Victoria Street, Derby, on March 15, Mr. Cope (President) in the chair, to consider the best means of opposing or amending Clause 2 of the Companies Bill, now before Parliament.

After considerable discussion and divergence of opinion, the following resolution, proposed by Mr. DAWSON, and seconded by Mr. PEMBLETON, was agreed to without dissent:

That this meeting is of opinion that Clause 2 of the Companies Bill, now before Parliament, should be opposed with a view to its entire elimination from the Bill, and that the local borough and county members of Parliament be communicated with, urging them to do their utmost to prevent its passing.

A letter was accordingly sent to the nine members representing Derbyshire signed by the President and Hon. Secretary as follows:

SIR,—At a meeting held on March 15, 1900, it was resolved to communicate with the members of Parliament for the county and borough of Derby, and draw their attention to Clause 2 of the Companies Bill before Parliament. This clause proposes to legalise the use of the titles "Pharmaceutical Chemist" and "Chemist and Druggist" by companies of unqualified persons, whilst individuals can only obtain and use these titles after examination and registration. Your constituents, who are qualified chemists, consider this proposal most unjust, as it sacrifices the vital vested interests of a legal qualification held by nearly 16,000 individuals for the sake of a number of unqualified persons who have invested surplus-capital in a business which they are not legally entitled to carry on as individuals. Whilst registered chemists do not wish to interfere in any way with the existing free-trade in drugs and medicinal preparations, they consider that, so far as their strictly professional duties are concerned, they are entitled to be placed on a similar footing to medical practitioners, dentists, &c., whose practice it is proposed to protect, as against companies, by Clause 3 of the Companies Bill.

The title "pharmaceutical chemist" or "chemist and druggist" is as valuable to its owner, and should mean as much to the public as that of "physician," "surgeon," or "dentist," and in the public interest, as well as in common justice to the legitimate holder of the title, should be as strictly protected. Your constituents therefore respectfully beg you to oppose the clause, with a view to its entire elimination from the Bill. It is expected that the Pharmaceutical Society will, in the event of the clause being rejected, obtain the introduction of a private Bill dealing with the question.

The letter is signed, on behalf of the Association, by Mr. J. A. Cope, President, and Mr. H. G. W. Dawson, Hon. Secretary.

Chemists' Assistants' Association.

AT the meeting held at 73 Newman Street on March 15, Mr. F. W. Gamble (President) in the chair,

"SHORT PAPERS"

by members were expected to fill up the evening, but two only were forthcoming. The first was a note on *Glaucium luteum* (yellow, or "sea" poppy), by Mr. J. W. Peck, which Mr. HYMANS read in the absence of the author. After a reference to superstitions in regard to drugs and herbs in different parts of the country, and to the fact that in many cases the properties of drugs had been recognised by housewives in the country long before their action had been explained by scientific research, the author said he had found the yellow-horned poppy growing in Devonshire. It is a plant possessed of distinctly sedative properties. The tops are gathered during August and September, when the flowers and capsules are in all stages of size and development. After drying they are ready for use. "For

pains" a kind of poultice is made by adding boiling water to a handful of the drug; for internal use a pinch of the drug is added to boiling water, allowed to cool, and the infusion is given in teaspoonful-doses as a sedative for children. Only one book (Gray's "Supplement," 1847) mentions the plant as medicinal, and since then no experiments have been made for the purpose of identifying the active principle. Gray refers to the plant as follows:—

Glaucium flavum, *Cheledonium glaucum*, yellow-horned poppy. Flower yellow; July, August. Biennial. Sandy sea-shores. Seeds and juice like those of *Argemone mexicana*, G. [called "Figo del inferno" by the Spaniards on account of the powerful narcotic effects of the seeds, which are stronger than opium. An emulsion of them acts first anodyne, afterwards purgative. Effects denied by some. Their oil is used for castor oil].

A vote of thanks was heartily accorded to Mr. Peck.

QUININE SALTS AND CHLORINE SOLUTION

is a remedy often prescribed for dysentery by the well-known West-end physician, Dr. Burney Yeo (see "Pharmaceutical Formulas," page 545). Mr. MORLEY TAYLOR stated that it presents some interesting features from a dispenser's point of view. The prescription consists of quinine dissolved by liberating chlorine by the interaction of HCl and KClO_3 :—

Potassii chloratis	...	...	...	5ss.
Acid. hydrochlor.	...	...	...	mxl.
Quinina sulphatis	...	...	...	gr. xxiv.
Syr. aurantii	...	...	...	5j.
Aqua ad	...	...	...	5xij.

M.S.A.

With a view of discovering the most suitable salt of quinine to use in order to fulfil the requirements of the prescriber, which evidently were the administration of quinine and free chlorine, he prepared two solutions of chlorine in the ordinary way, the first (*a*) containing 0·15 per cent., and the second (*b*) containing 0·08 per cent. of chlorine. He then dissolved in three separate ounces of each solution 2 gr. of quinine (alkaloid), quinine sulphate, and quinine hydrochloride respectively. In all cases the smell of chlorine practically disappeared in three hours. At the expiration of twelve hours he estimated the amount of chlorine left in the several solutions, and he found it to be as follows:—In (*a*) solution containing quinine alkaloid 0·05 per cent. of chlorine, in (*a*) solution containing quinine hydrochloride 0·07 per cent., while in (*b*) solution containing quinine sulphate only 0·01 per cent. chlorine was left. All these solutions became red. The chlorine solution was then made in the dispensing-bottle as ordered by Dr. Yeo—viz., by the addition of HCl to KClO_3 —and when estimated the solution was found to contain 0·09 per cent. of chlorine. The curious fact was shown that in dissolving all the salts in the 0·09-per-cent. solution he got no coloration. The solution of quinine in this smelt strongly of chlorine after twenty-four hours, but did not contain the original amount of chlorine. From these experiments it would appear that the hydrochloride dissolved in Yeo's solution was the most desirable and stable mixture to use. From a chemist's standpoint he thought the matter of this change and coloration was profoundly interesting.

Mr. GAMBLE, in opening a speculative discussion, said he had often seen the mixture dispensed as Yeo's solution, and thought that the salts were all affected to the same extent. Did Mr. Taylor estimate the chlorine solution without quinine that had been standing for three or four hours and compare it? He had noticed repeatedly that Yeo's solution almost invariably contained hydrochloric acid, chlorate of potash, and quinine, but he had never seen a red coloration. He thought that the actual salt of the alkaloid had nothing to do with it, and that there was some substitution formed in the quinine molecule itself. He had no recollection of the thalloquin reaction being given.

Mr. HYMANS said the actual theory of it had, he believed, been disputed recently, and asked Mr. Morley Taylor if he conducted the experiments in the light or the dark.

Mr. MORLEY TAYLOR, in reply to the Chairman, said he had not estimated the chlorine solution without quinine after it had been standing. The experiments were conducted neither in the sunlight nor in the dark; a safe medium light was chosen. The whole question had been gone into

since noon the previous day; it was purely a dispenser's query, and now that the Pharmaceutical Society's library was closed in the evenings he had no opportunity of looking the matter up.

This was all the business.

Liverpool Pharmaceutical Students' Society.

The closing social meeting of the session took the form of a "smoker" at the Kardomah Café. There was a good attendance of members and friends, under the presidency of Mr. Prosper H. Marsden, F.C.S. An excellent programme of music, recitation, and song was rendered, and a collection made on behalf of the Benevolent Fund of the Pharmaceutical Society. On the proposition of Messrs. SHACKLADY and COWLEY, a hearty vote of thanks was accorded to the artists. The PRESIDENT took the opportunity of thanking the members for their loyalty during the session, and paid a tribute to the labours of the Secretary and Treasurer, Messrs. Partridge and Jenner. "God Save the Queen" brought a most enjoyable meeting to a close.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING of this Association was held on March 14, Mr. Fraser McDiarmid (President) in the chair. Mr. W. DUNCAN contributed a note on

SOLUTION OF ARSENIC,

in which he advocated the adoption of a plain 1-per-cent. solution of arsenious oxide in place of the three official solutions now in use. He deprecated colouring the solution on account of the behaviour of the colouring-matter when prescribed in combinations. Mr. Duncan then read a note on

LOTIO HYDRARGYRI NIGRA,

in which he said that some time ago, when examining the clear portion, he was surprised to find mercury in solution, apparently in the mercurie condition. The reaction is probably that the mercurous oxide formed from the ealomel and CaO_2H_2 partially broke down into mercurous oxide and metallic mercury, the water becoming slowly saturated with the former, which was slightly soluble. Most authorities state that mercurous oxide is very unstable, decomposing even by rubbing in a mortar, and it is probable that the calcium chloride in solution hastens such decomposition by forming a soluble mercuric double salt. The question arises, To what was the therapeutic activity of black or yellow wash due—the insoluble precipitate or the dissolved salt? If the latter, would it not be better to use a diluted liquor hydrargyri perchloridi and delete the black and yellow mercurial lotions from the Pharmacopoeia? Mr. Duncan also contributed some

DISPENSING NOTES.

Cerat. galeni	...	...	...	5j.
Adipis lance	...	...	...	5j.
Resorcini	...	...	...	50 per cent.

Ft. unguent.

The difficulty here was to decide what quantity of ointment should be sent. A reference to the prescriber showed that he intended a 4-oz. ointment—2 oz. fat and 2 oz. resorein.

Zinci carb.	...	...	...	5j.
Pulv. amyli	...	...	...	5j.
Glycerini	...	...	...	5ss.
Aq. ad	...	...	...	5ij.

Sig.: M. D.

Was this intended to be a cream or a paste? It was sent out with a "shake-the-bottle" label.

Ferri et quin. cit.	...	...	...	5ij.
Potass. citrat.	...	...	...	5ij.
Aq. ad	...	...	...	5ij.

M.

Here citrate of quinine was precipitated by salting out. Suspension of the alkaloid by mucilage with a "shake-the-bottle" label was, he thought, preferable to the addition of

citric acid as a solvent, as when the latter was added the crystalline acid citrate was preoipitated on standing.

An interesting discussion followed, and a cordial vote of thanks was awarded to Mr. Duncan.

Glasgow Chemists' and Druggists' Assistants' Association.

AT the meeting on Friday, March 16, Mr. THOS. S. BARRIE, Ph.C., delivered a lecture on

PLANTS AND THEIR DISTRIBUTION.

There was a large and appreciative audience. Mr. Barrie, in introducing his subject, said that the keynote of the matter was evolution. He then defined species and genus, illustrating this by the cat and the thistle as representatives of the animal and vegetable kingdoms respectively, and by *Rosa* and *Pruinus* as illustrations of genera. Darwin's theory of variation with natural selection as the origin of species was next discussed, and illustrated by marigolds and gorse (*Ulex europeus*). In the latter case the spiny leaves and branches are due to variation to prevent consumption by browsing animals. The idea of evolution is amply confirmed by the testimony of the rocks. This was illustrated by a splendid selection of fossil plants lent by Mr. MacNair, the Curator of the People's Palace. After discussing the formation of fossils, their occurrence, and the imperfection of the geological record, Mr. Barrie gave a short sketch of the way in which rocks had been deposited, and showed how it is possible to tell their relative ages from the fossils they contain. There are five divisions in the earth's history, and these the author sketched. The first, or Archean, was a dead period; the next division was the Primary, which is divided into the Silurian, Devonian, and Carboniferous periods. The plants of the Carboniferous period have been mineralised into coal. In the Tertiary division of time there was a reduction in temperature all over the globe, and what was all tropical gradually became differentiated as it is now; great changes resulted in the separation of America, Madagascar, and Australia from the continent existing then, whereby different standpoints were set up, from which evolution proceeded on different lines. Thus the flora of these places is most remarkable, owing to the number of peculiar forms. The lecturer next summarised the order of probable development, beginning with thallophytes, and passing through bryophytes, pteridophytes, and gymnosperms to angiosperms, and told how the last was first monocotyledonous, then dicotyledonous. The second part of the lecture referred to the distribution of plants, and here the lecturer spoke of the intense competition among plants which has resulted in climbing and other plants. Discussing the flora of islands, he showed how it depends on whether the island is volcanic or continental. A continental flora has always many peculiar or endemic forms, depending on the length of time it has been isolated. An oceanic or volcanic island has no flora of its own—only what it gets from neighbouring countries. Referring to the flora of distant lands, he showed that, according to our evolutionary theory it must vary. Plants live where they can, and hence the floras of districts similar in every way resemble each other closely. Referring to latitude and altitude, he showed their equality, illustrating his idea by a journey from the equator to the pole and by the ascent of a mountain at the equator. The lecture was illustrated by lantern-views.

At the close, Mr. J. P. GILMOUR (the Chairman) spoke of the pleasure it had given him to listen to Mr. Barrie, and thanked him in the name of the Association. He then referred the death of one of the members, and it was agreed to send a message of condolence to his relatives.



MR. T. S. BARRIE.

Pharmaceutical Society of Great Britain.

NORTH BRITISH BRANCH.

A MEETING of the North British Branch was held at 36 York Place, Edinburgh, on March 21, Mr. Peter Bea presiding.

The CHAIRMAN said he was sorry he had again to make reference to losses they had sustained by death. Mr. Watt, Haddington, had a long connection with the Society; he, personally, had pleasant recollections of him, and found him a man of good judgment and agreeable manners. He also alluded to the death of Mr. Burley, who had taken a considerable part in the proceedings and was a member of the present executive. They not only lost him as a neighbour, but as an active member of the Society. He was sure they would all give permission to send letters of sympathy to the representatives of Mr. Watt and Mr. Burley. This was agreed to. Mr. Hill then read a paper on

THE VOLUMETRIC ESTIMATION OF RED-LEAD.

By James F. Tocher, F.I.C.

Dissatisfied with Sutton's method for volumetrically assaying, the author and Mr. John Don, B.Sc., have experimented with the view of finding a better process. He described their results in considerable detail, showing where the method is at fault. They find that if the weighed quantity (2.064 grammes) of red-lead is treated with normal nitric acid (sp. gr. 1.05), then add 50 c.c. of 1/5 oxalic acid, and neutralising with barium hydroxide, a truer estimate is obtained on titration with permanganate. Other methods were suggested for determining the value of the peroxide with fair accuracy.

Dr. DOBBIN said before discussing and criticising such a paper he would require time to look into it. Mr. Tocher had attacked the problem of devising an apparatus consisting solely of glass so as to obviate the absorption of chlorine or iodine. He hoped it would be an improvement even on the apparatus which he understood had been put on the market in Germany, but had not reached Edinburgh. One curious use had been made of red-lead. Someone had discovered that when flashed with an aniline dye it could be sold as vermilion. The sophistication was discovered in the examination of a so-called vermilion which, on analysis, yielded no mercury. The sample had given rise to a great deal of trouble among students who were estimating mercury and could not find any. (Laughter.)

Mr. LUNAN said the paper was an object-lesson of what a pharmacist could do in adapting himself to the work of his district.

Mr. DOTT and the CHAIRMAN contributed some remarks, and Mr. HILL replied and stated some purposes for which red-lead was used. It was open to considerable adulteration, which unfitted it for technical purposes.

COCHINEAL AND CARMINE.

Two papers on this subject were communicated by Mr. GEORGE MERSON, F.C.S., Newcastle-on-Tyne. The first dealt with the ash-percentage of cochineal. The author, thinking that the pharmacopeial 6 per cent. was too high, examined thirty-one commercial samples of dark-grain and silver cochineal, and found the ash percentage to vary from 2.4 to 43.6 per cent. The dark-grain samples, however, yielded 3.7 to 12.4, while the silver variety yielded from 2.4 upwards. No fewer than twelve out of twenty-five samples yielded 11.2 per cent. and over. In igniting, the addition of a little pure silica is an advantage, as it makes the burning easier. Even in the dark-grain cochineal the author found that the lighter grains yielded a higher percentage of ash than the dark. The author came to the conclusion that cochineal is largely doctored, but there is little difficulty in obtaining genuine cochineal with about 2 $\frac{1}{2}$ per cent. of ash. He judged the colour of the samples by determining the number of c.c. of chlorinated soda-solution required to decolourise 1 gr. of the cochineal. The amounts varied from about 22.4 c.c. in the case of the best to 9.6 c.c. for the poorest samples, and the colour-values ranged from 112 to 48.

These results induced the author to examine carmine as well. He used the following colorimetric method:—

Weigh 0·5 grammes of finely-powdered cochineal; place in a 100-c.c. flask with 30 c.c. of distilled water, and 5 drops of liquor ammonia; heat to boiling-point, strain through cotton-wool into a 100-c.c. flask, and wash with sufficient water to produce 100 c.c. The marc on the wool should now be quite colourless. Put 25 c.c. of the liquid into a 100-c.c. stoppered test-mixer, add 5 c.c. of strong hydrochloric acid, and sufficient distilled water to produce 100 c.c. Run in 0·5 c.c. at a time of solution of chlorinated lime (or soda), containing 1 per cent. available chlorine, till the cherry-red colour changes to dull orange, shaking briskly after each addition. Continue adding chlorinated solution in 0·1 c.c. portions as long as the colour is being bleached. When almost completed, note the burette-reading, and after adding a further 0·1 c.c. of solution, shake the liquid slightly and see if the top layer is lighter than the lower. If there is no difference, the reaction is finished; if the lower stratum is darker, continue to add chlorinated solution drop by drop till the reaction is quite complete.

The description may seem complicated, but in practice it can be performed with the utmost ease, and the end-point is well defined and reliable. The titration should be performed a second time more carefully. The number of cubic centimetres of chlorinated solution used multiplied by 8 gives the quantity of solution required to destroy the colouring-matter of 1 gramme of cochineal. In examining a series of samples it is immaterial what strength of chlorinated solution is used. The official solution of either lime or soda diluted with an equal volume of distilled water answers very well, and gives the relative values of a series of samples; but for strict comparison I suggest a 1-per-cent. solution as a convenient standard.

It may be objected that lime salts precipitate the colouring-matter of cochineal, but while this is so it cannot in the slightest degree affect the delicacy of the reaction, nor the accuracy of the results. Mineral acids act as precipitants, whilst 50-per-cent. acetic acid is a solvent of the colouring-principle. As, however, it is not advisable, even if practicable, to titrate in presence of a large bulk of acetic acid of this strength, and as any precipitate of the colouring-matter by the hydrochloric acid is so finely divided and diffused through the liquid, the latter is preferably employed.

Experiments were made to see whether a larger or smaller proportion of acid added to the cochineal decoction before titration in any way modified the results. Too little acid (say, just what is theoretically necessary to decompose the chlorinated solution) does not liberate the chlorine with sufficient rapidity, and consequently does not give so sharp a reaction, whilst a larger amount is in no way objectionable. In preparing the cochineal decoction the trace of ammonia is used to ensure perfect and rapid exhaustion, thus ensuring the uniformity which might not be obtained by using water only. The infusion made from the dark grain is of greater tintorial power. This is not universal, but it goes to show that cochineal cannot be judged by the eye from the depth of colour it imparts to distilled water. The author suggested that the ash-limit given in the Pharmacopœia is too high, and should, if retained in future issues, be placed at not more than 4 per cent., and that some test for colour-valuation on the lines indicated above should be added to the present official tests. As to carmine he submitted the following results:—

No. of Sample	Ash per Cent.	C.c. Chlorinated Solution Used per Gramme	Colour-value
1	6·5	32	100
2	8·5	31	97
3	7·0	30	94
4	6·0	28	87
5	4·8	24	75
6	5·2	24	75
7	6·8	10	51

In estimating the colour-value, 0·1 grammes of the sample is treated precisely in the same way as the cochineal, except that boiling and filtration are not necessary. A high-grade carmine is taken as standard, and called 100.

This was followed by the reading of a note by Dr. COULL on

ASH PERCENTAGES OF COCHINEAL,

in which he found that samples examined by him during the last six years bore out the estimates made by Mr. Merson. He pointed out that some samples with a large percentage of ash were dearer than those with a lower percentage. He advocated the reduction of the pharmaceutical limit.

Mr. LUNAN expressed astonishment at the statement that the colour-value of cochineal could not be estimated by the eye.

Mr. DOTT said it was evident that in this case, as perhaps in some others, the official ash-standard was not satisfactory. The weak point in the colour-valuation process was that other colouring-matters, such as aniline colours, might mislead. The papers were interesting and useful.

Mr. COWIE said his experience was similar to Mr. Merson's as to the ash-percentages.

The CHAIRMAN said he had been so dissatisfied with cochineal as a colouring-agent that he had discarded it altogether.

Mr. HILL replied, and votes of thanks were given to the authors of the communications.

Trade-Marks Applied for.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1/-, obtainable through any money-order office.

(From the "Trade-marks Journal," March 7, 1900.)

"DAYKAM" (no claim for "Day"); for chemical substances, &c. By J. E. Thornton, Rokeby, Altringham. 226,257.

Signature of applicant; for chemical substances. By H. Moreton, 12 Mount Stuart Square, Cardiff. 228,329.

"FLYSAC"; for a sticky fly-catcher. By Kay Brothers (Limited), St. Petersgate Mills, Stockport. 228,447.

"GOUDRON DE GUYOT," signature, &c. (essential particulars are the signature and devices); for a pharmaceutical preparation. By A. Champigny et Cie., 19 Rue Jacob, Paris. 225,860.

"EIGON" (no claim for "Eig"); for albumen, peptone, &c. By E. Dieterich, Hellenberg, near Dresden. 227,710.

"SWIFT AND SURE," and device of messenger-boy; for medicine. By Thomas Bowick, 27 Canfield Gardens, N.W. 227,567.

Device of burning brazier; for medicated cotton-wool. By Vandebroek et Cie., 136 Boulevard de Waterloo, Brussels. 227,577.

"VEONE": for patent medicines. By Joe C. Stott, 132 Sheffield Road, Barnsley. 227,985.

"ST. EUNAN'S OINTMENT"; for a skin-ointment. By Newball & Mason, Hyson Green, Nottingham. 228,413.

"WARMINE" (no claim for "Warm"); for chemical substances. By Newball & Mason, Nottingham. 228,415.

"MARSHALL'S (LIMITED)," and device of a reel; for toilet-articles. By Marshall's (Limited), 27 Red Lion Square, W.C. 225,528.

"GARDEN-PARTY BOUQUET"; for perfume. By Lecaron & Fils, 6 Avenue de l'Opéra, Paris. 228,012.

"FELICIA"; for perfumery, &c. By G. W. Goodwin & Son, Ordsall Lane Soap-works, Manchester. 228,223.

(From the "Trade-marks Journal," March 14, 1900.)

"PROPIOL": for chemical substances. By G. B. Loefler, 83 Upper Thames Street, E.C. 228,196.

Picture of St. Julian, name of firm, &c.; for chemical substances. By Edward Cook & Co. (Limited), Bow, E. 228,678, 228,679.

"KINGFISHER BRAND" and "OUR JACK"; for chemical substances and perfumery. By A. M. Bickford & Sons, Currie Street, Adelaide. 228,161, 228,164.

"ANTIGOTIN" (no claim for "Anti"); for chemical substances. By the General Chemical Company (Limited), 57 Chancery Lane, London. 228,393.

New Companies & Company News.

JOHN MORGAN & CO. (LIMITED).—Capital 1,608*l.*, in 1*l.* shares. Objects: To acquire the business carried on at Liverpool by the executors of the late J. Morgan, and to carry on the business of oil, colour, and varnish makers, chemists' sundriesmen, &c.

HARTELEOOLS CEMENT COMPANY (LIMITED).—Capital 14,000*l.*, in 5*l.* shares. Objects: To carry on the business of cement, concrete, and brick makers, mineral merchants, chemists, druggists, oil merchants, &c. The first directors are G. Booth, M. Bolton, J. W. Crosby, J. K. M. Hessler, T. Joplin, and F. Sivewright.

ALFRED HOPPS & SONS (LIMITED).—Capital 10,000*l.*, in 50*l.* shares. Objects: To acquire the business carried on at Liverpool as "Alfred Hopps & Sons," and to carry on the business of blenders and refiners of and in vegetable and mineral oil and the products thereof. The first directors are A. C. Hopps, F. C. Hopps, A. B. Hopps, and W. G. Hargreaves. Qualification, 250*l.* Remuneration, 200*l.* each per annum.

ROBERTS' DENTAL INSTITUTE (LIMITED).—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of dentists, dental surgeons, manufacturers of surgical and other instruments, &c. The subscribers are:—H. F. Dott, 42 Dudley Road, Ilford, Essex, printer; W. A. Lawder, chartered accountant, T. Dott, merchant, and E. C. Bowtell, clerk—all of 11 Ironmonger Lane, E.C.; J. H. Dott, 79 Cornhill, E.C., insurance-broker; and Mrs. M. Roberts and F. G. Roberts, dental surgeon—both of 115 Church Lane, Old Charlton. Registered without articles of association.

COUNTY DENTAL ASSOCIATION (LIMITED).—Capital 500*l.*, in 1*l.* shares. Objects: To acquire the business carried on by F. Sarson at 2 Crescent Road, Rhyd, and to carry on the business of artificial-teeth makers, scalers, fillers, stoppers, and extractors of teeth, &c. The first subscribers (each with one share) are:—F. Sarson, 2 Crescent Road, Rhyd, artificial-teeth manufacturer; F. J. Sarson, auctioneer, and Mrs. M. A. Sarson, 7 Crescent Road, Rhyd; J. H. Gai'binn, 9 Edward Henry Street, Rhyd, gentleman; R. B. Arnold, 9 Sussex Street, Rhyd, draper; Miss H. F. Farr, Avondale, Water Street, Rhyd; and E. K. Miller, 5 Sussex Street, Rhyd, draper.

WOODSIDE CHEMICAL COMPANY (LIMITED).—North Woodside Road, Glasgow. To be wound up. Mr. James Wilson, F.S.I.A., Glasgow, liquidator.

NORTH BRITISH CHEMICAL SYNDICATE (LIMITED).—It has been resolved to wind up this company, and Mr. R. A. Murray, chartered accountant, Glasgow, is the liquidator.

SCHWEPPES (LIMITED).—The directors recommend a dividend of 2½ per cent. on the preference shares, being balance of 5 per cent. per annum; 3½ per cent. on the ordinary shares, being balance of 7 per cent. per annum, and on deferred shares a dividend at the rate of 2 per cent. for the year.

PROFESSIONAL AND CIVIL SERVICE SUPPLY ASSOCIATION (LIMITED).—The annual meeting of the members of this association was held in Edinburgh on March 15. There was a large attendance, and the report of the committee was ultimately adopted, with the aid of proxies, by a majority of 445.

EUGEN DIETERICH (LIMITED) (properly speaking "Chemische Fabrik Helfenberg auf Actien vorm. E. Dieterich") have issued their second annual report. It covers 1899, and shows gross profit of 145,515*m.*, which is to be apportioned as follows:—Writing off, 58,317 43*m.*; reserve fund, 4,143 70*m.*; 4 per cent. dividends on ordinary shares, 32,000*m.*; directors' fees, 3,271 12*m.*; board of directors' fees, 4,000*m.*; 5 per cent. bonus 40,000*m.*; and allotment to the pension fund, 1,000*m.* The sum of 2,783 17*m.* is thus carried forward.

ABERDEEN COMB-WORKS COMPANY (LIMITED).—The report of the directors of this company for 1899, to be presented at the meeting to be held in Aberdeen on March 23, states that the profit was 18,518*l.* Interest paid to the vendors absorbed 3,164*l.*, and directors' fees 1,500*l.*, leaving 13,854*l.*, which the directors recommend should be dealt with as follows:—Dividends of 2½ per cent., absorbing 3,192*l.*, on the preference, and of 6 per cent., absorbing 4,235*l.*, on the ordinary shares; writing off preliminary expenses, 6,134*l.*; to carry forward, 232*l.*

MAGOR (LIMITED).—On March 19 a poll of the shareholders of this company was taken as to whether the report of the Advisory Committee presented at the meeting on

March 14 should be accepted. Particulars of the report were given in our issue of March 17, page 481, and it will be remembered that it was approved by the preference shareholders, but rejected by the ordinary shareholders. The poll resulted in 12,059 votes being given against the recommendations of the directors and the committee, and 11,922 in favour of them. Mr. Thos. Needham, who is chairman and managing director of Needhams (Limited), has been appointed chairman of the company, and managing director conjointly with Mr. Cornelius Bayley, the present managing director.

WILLIAM RADAM'S MICROBE-KILLER COMPANY (LIMITED).—In the Chancery Division of the High Court of Justice on March 17 Mr. Justice Byrne sanctioned a petition for the reduction of the capital of this company from 35,000*l.* to 22,500*l.*, divided into 10,000 preference shares of 1*l.* each and 2,500 ordinary shares of 5*l.* each. Counsel stated that the company was formed in 1890 for the purpose of acquiring a patent process. The reduction did not affect creditors or the voting power, and was effected by the cancellation of paid-up capital, which had been lost, or was unrepresented by available assets, to the amount of 10,000*l.* Evidence was put in to the effect that the purchase-price of the property was 16,000*l.*, but that the value at the present time does not exceed 8,000*l.*

TRITICINE (LIMITED).—The directors of this company again appeared for examination at the Wakefield County Court last week, and Mr. John Hick, one of the directors, stated that he had lost 7,000*l.* by his connection with Triticine (Limited). He was present at the meeting of directors when the prospectus was discussed, and he remembered that on that document there was printed in red ink a statement to the effect that over 30,000*l.* worth of shares had already been applied for. Very many persons applied for shares, including Sir George Newnes, who asked for 24,000*l.* worth. He thought that was a *bona-fide* application, but he understood that Sir George Newnes repudiated it, and no shares were allotted to him. Other persons also repudiated applications. He had no knowledge of company promoting, and had lost all the money he had through the company. The 30,000*l.* which according to the prospectus had been applied for, were never allotted to anybody. He personally left all matters to the manager, in whom he had every confidence. He thought Triticine a very good food, and thoroughly believed in it. After further examination the witnesses' evidence was closed, and the case adjourned until March 27.

UNITED ALKALI COMPANY (LIMITED).—The annual meeting of the shareholders was held in the Royal Association Rooms, Liverpool, on March 16, when fully 600 were present, but all who wished to attend could not find room. Sir Charles Tennant, Bart., President of the Company, occupied the chair and in a few sentences introduced Mr. John Brock, chairman, who at once entered upon an explanation of the present position of the company and the reasons why a dividend could not be paid on the ordinary shares. These reasons substantially were that the great increase in the cost of raw materials during 1899 and the explosion at St. Helens Chlorate Works were responsible for a loss of 100,000*l.* Coal alone had cost them 50,000*l.* m.e., and other raw materials 30,000*l.*, while the St. Helens explosion made up the difference. After analysing the accounts for the year Mr. Brock stated that the net profit after payment of debenture interest and all other charges was 198,765*l.*, or 50*l.* more than in 1898; the present capital of the company is 7,196,915*l.* The business in 1899 had been exceedingly good, and this year it promised to be even better. Considerable discussion followed, which, however, did not touch any material point, the speakers advocating the sales of soap and other of the company's products among the shareholders themselves. But to that Mr. Brock gave a very effective reply, stating that circulars regarding the soap had been sent out to all the shareholders last year with the report, but there had been practically no response. They had done their best to push the sale of their Cashmere soap, and would be glad if the shareholders would induce retailers to take it up. Ultimately the motion for the adoption of the report was carried, and the retiring directors, Messrs. John Brock, J. C. Gamble, and W. Gamble, with Lieutenant-Colonel J. B. Gaskell, were reappointed.



TO CORRESPONDENTS—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

The Council Election.

SIR,—The action of the Chemists' Assistants' Union in again nominating Mr. R. E. Wright ought to commend itself to every assistant in the Kingdom who has the welfare of the craft at heart. The cry for some time has been that new blood was wanted in the Council, and during last year it has been demonstrated how difficult it is for one Progressive member to stand alone. At the approaching election it is to be hoped that the members of the Society will elect a proportion of Progressive members to assist the craft through what promises to be the most critical period of its history. Now is the time for action if any has to be taken, and before it is too late chemists should do all in their power to make the Council sufficiently powerful to carry out the views of the majority of its members. The idea of an assistants' representative is good, seeing that a fair proportion of the members of the Society are still assistants, and they, as the chemists of the future, should have a voice in pharmaceutical polities.

Faithfully yours,

ANTI-APATHY. (29/41.)

SIR,—I notice in last week's journal a short letter (in the shape, no doubt, of a feeler) emanating from a member of the Council, Mr. Glyn-Jones, and appealing to the members of the Society, soliciting their views on the important question of the coming Council election, asking for opinions on the subject, and also for names of new candidates, so that some concerted action may be taken with a view, I presume, to the introduction of new blood on the Council.

Coming as this appeal does from a member of the Council, and at a critical period, when it is absolutely necessary for that body to be united and harmonious, it certainly seems remarkable, and has a serious claim on our consideration.

It is very apparent that Mr. Glyn-Jones is under the impression (rightly or wrongly so) that the present Council would be considerably improved for the better if a few of its present members could be quietly relegated to other spheres, and their places filled by new and inexperienced men.

When we carefully read Mr. Glyn-Jones's letter we are driven to ask ourselves this important question: Can it be possible that a clique still exists on the Council, and that it would be to the benefit of that body and all concerned if, through the coming election, it could be broken up or removed?

I hold no brief for Mr. Glyn-Jones, but taking as I do a more than ordinary interest in pharmaceutical matters, I have carefully followed him since his election, and must admit that the Council would be a considerable gainer if it included in its ranks a few more men of the same grit, perseverance, and sound up-to-date common sense that he has shown since he was elected.

That we have most excellent men on the Council of the Rymer Young and Newsholme type we admit, and are very proud of them, and at a time like this, when it behoves us to be united, we have no desire to drag into light the past apathy, indifference, and perhaps incapacity of the Council; but if at the present time there is a clique on that body so shortsighted that it still clings to its old antiquated worm-eaten policies that have brought us to our present deplorable and almost desperate condition, the sooner members speak out clearly, the better, so that the matter may be known and an understanding may be arrived at with a view to using concerted action to remedy it once and for all.

Burnley.

JNO. A. HEATON.

SIR,—The present attitude of the Council is an admirable example of a tardy effort to do as little as possible, and so

essentially characteristic that the wonder is that anything different should have been anticipated. They have done their best as the existing Council, and, since chemists with the privilege of voting have been content to accept the delusive policy of silent trust for upwards of twenty years, it naturally follows that something more than grumbling is necessary to convert the atmosphere of the chamber from that of clubland to that of the workshop. Call it what you please, the behaviour of the Council and chemists alike has been no credit to either, and has landed the trade (or profession) into perhaps a hopeless muddle. The position is rendered all the more unlikely to improve on account of the multiplicity of proposals introduced by those of the modern school. I cannot claim the experience of Mr. Lord Gifford, but have always thought the most definite and only solution of the problem lay in the addition of an "s" to the word "person" in the Pharmacy Act. Now an opportunity occurs of "going one better"—i.e., claiming prominence in Clause 3 of the Companies Bill. Success may not immediately follow; but, to quote our plucky friends at Blackburn, we may as well (in fact, self-respect demands it) have "a jolly good try."

I am, Sir, faithfully yours,
Penzance, March 20.

WALTER H. KEEN.

SIR,—In reading the letter with the above heading in THE CHEMIST AND DRUGGIST of March 10, it occurred to me that "Public Dispenser" is looking for a much-desired element in the Council that I am afraid is a long way off. Why disturb the present members who have done so much for us? Have they not allowed limited companies to bag the best part of the retail and dispensing trade, the apothecary's assistant to fill many public appointments, and the Army compounding to displace the Poor-law dispenser? What more would he have them do? He is evidently not content with the present state of things whereby the Council secures to all registered men the right to sell in open shop pennyworths of laudanum, paregoric, precipitate powder, chlorodyne, fluid magnesia, and amyl nitrite; whilst the dispensing of eserine, atropine, aconitine, and other like substances may be done by ladies and gentlemen who hold the dispenser's certificate of the Apothecaries' Hall or are Army compounders. The latter gentlemen appear to be considered by some members of the present Council as quite capable of handling such substances "without danger to the public"—at least, they do nothing to prevent it. Unless new blood be introduced into the Council the true pharmacist will find his occupation gone, and no one but himself will be to blame. For a change, we might try electing to the Council men who will exert themselves to the general interests of the trade. I hope to see more men like Mr. Glyn-Jones on the Council—men who are fully alive to our position, and would lose no opportunity of improving it.

Yours faithfully,
M.P.S. AND POOR-LAW DISPENSER. (29/54.)

The Companies Bill.

SIR,—I offer the following clauses for the consideration of my fellow-craftsmen, and suggest they should take the place of 2 and 3:

(2) After the passing of this Act it shall be unlawful for any company to be formed in the United Kingdom to carry on any business or profession, or do anything for which a personal qualification has been required by law, unless and until every shareholder in or member of such company does himself or herself possess such qualification, and if any company should be formed in contravention of the above, and do any of the things which only a qualified person may lawfully do, then such company shall be subject to the same penalties as an individual who, not being qualified, did the same thing, and may be proceeded against in the same way.

(3) Nothing in the preceding clause shall extend to or affect any company in respect to any business carried on before the passing of this Act and afterwards continued, provided a properly-qualified person conduct the operations at every place where the business is carried on; but this exemption shall not apply to any new business, nor shall it apply if any unqualified person become a shareholder in or member of such company after the passing of this Act.

Yours truly,
DIPLOMAT No. 2. (32/58.)

SIR,—In the course of Mr. Boot's long "Epistle to the Commons," he fails to bring forward any sound argument in

favour of the contention that a company—*i.e.*, seven unqualified men—may call themselves by a title which is to be obtained by the individual only at the cost of long-continued study and as a reward of satisfactory examination. "Boots" have spent thousands of pounds on building signs, &c., on which they presume to describe themselves as chemists. What has this to do with it? If I spend money lavishly on brass plates and elaborate billheads describing myself as a dentist, that does not assist me, and would be no sort of argument with the General Medical Council for the continuation of the mendacity. It is somewhat on a par with the man who builds a fine house on the off-chance of securing for it, when built, a wine-and-beer licence—a course which, I believe, often fails to favourably impress the magistrates. There was nothing especially objectionable about "Boots' Pure Drug Company (Limited)," but when it comes to "Boots' Cash Chemists," it is nothing but pure usurpation. Mr. Boot's heart yearns for the public welfare. This is, of course, all bunkum. If the companies' stores were all closed to-morrow the public would still get their drugs at store-prices. The chemist was first in the field with these low prices, and would be again. Mr. Boot poses as a benefactor to the masses in several Midland towns; how are all these innocents to know that they are really paying, making up for low prices elsewhere? If prices were all over as at Bristol, Birmingham, Manchester, and Leicester, there would be small dividends. From a comparison of prices it is evident that a few towns practically provide the dividends. This may be business, but it certainly is not benefaction to the inhabitants of those towns.

I talk to hundreds of chemists and managers of stores also in various parts of the country, and the prevailing idea is that you cannot suppress the practice of pharmacy by companies, but that we can, and ought to, protect our title. The majority of our fellow-creatures, even members of Parliament, will concede this much.

Yours truly,
HERE AND THERE (30/16.)

Taxing Aleoholie Medicines.

SIR,—Seeing that the Chancellor of the Exchequer has, upon suitable representation, withdrawn his proposed new tax on produce-brokers' contract notes, I, in common with many others, would like to know what steps our counsellors have taken to secure exemption of spirits used for medicinal purposes from the proposed new duty. I have for years paid income-tax, which in itself is a hardship considering the smallness of income derived from the business of a retail chemist, and, while I do not complain much of that, nor of the temporary addition of one-third being added, I certainly do consider it very unfair that we should be saddled with an additional tax of 10% to 20% on the spirit used in the many preparations belonging to our business, and on which we cannot possibly recover one farthing from the public. I think this falls particularly hard on the small retail chemist, and that some redress should be sought, and I am quite sure, if our Society exercised a little common sense in such matters as this, far more chemists would be on their rolls than now appears.

Yours truly,
EDWIN FOWLER.

Hull, March 20.

Otto of Orris.

SIR,—In your notice of the sample of otto of orris exhibited by Messrs. Horner & Sons at the last evening meeting of the Pharmaceutical Society you state that I "obtain from each 5 parts of concrete oil 1 part of transparent fluid otto." What the note that accompanied the sample stated was: "It . . . develops the characteristic odour of orris-root to several times the extent which a similar quantity of concrete oil would produce." Owing to the varying odour-value of the concrete oil a more definite statement could not be made. The preparation of the concrete oil does not form part of the process, the object of which is the non-production of the inodorous solids.

And I may state that in trials with concrete oil as a starting-point the resulting yield was less than 10 per cent.

I am, Sir, your obedient servant,
J. C. STEAD.

Mitre Chemical-works, Cordova Road, Bow,
March 17.

Help Wanted.

SIR,—I am collecting information concerning the state of the various hospitals and schools of medicine, surgery, and pharmaeuy for the purposes of the Carmichael Essay.

In order that the statements regarding your institution may be as full and complete as possible, I respectfully request that you will be good enough to let me have the latest information regarding it.

You will also, doubtless, have many suggestions to make respecting the improvement of the profession, and if you will be good enough to let me have them for the purposes of the essay I shall deem it a great favour.

It would be an additional service if any details you are pleased to give or suggest were typed.

As the author of the essay is required to lodge it with the Royal College of Surgeons, Ireland, before July 1, a reply as soon as possible would be greatly esteemed.

I am, Sir, your obedient servant,
188 Clonliffe Road, Dublin, J. C. MCWALTER.
March 14.

The information required comes under one or more of the following heads:—

(1) The state of the medical profession in its different departments of physic, surgery, and pharmacy in Great Britain and Ireland at the time of writing these prize essays.

(2) The state of the hospitals and schools of medicine, surgery, and pharmacy.

(3) The state and mode of examination, or of testing the qualifications of candidates of the different licensing colleges or corporations of medicine, surgery, and pharmacy.

Under these heads the authors will be pleased to make suggestions as may occur to them respecting the improvement of the profession, with the view of rendering it more useful to the public and a more respectable body than it is at present. In these suggestions the authors will be pleased to consider the preliminary and moral education of medical and surgical students, as well as the mode of conducting their professional studies.

[The above is a circular-letter. Perhaps some of our subscribers and readers would like to help Dr. McWalter.—EDITOR.]

The Pharmaceutical Examinations.

SIR,—Will you kindly allow me space in the *C. & D.*, to offer a suggestion to those interested in the pharmaceutical examinations to combine, and see if they cannot prevail upon the examiners to ask all candidates entering for the examinations on the same day, as far as practicable, the same questions, ensuring thereby, as nearly as possible, a fair examination. I think most of your readers must agree with me that, at the present time it is far from being fair; if not, why is it that some of the best students in the various schools are thrown out, while some of the indifferent ones are passed? Then, again, a candidate who has failed several times in his second day will, on again entering, be sent down the first day. The examination cannot be fair or this could not occur, for, surely, he must be better prepared with an additional three or six months' study at a college. How is it that time after time the percentage of passes at each examination averages about twenty-five? It is certainly remarkable that they should be so equal. Have the last men in to suffer?

Yours obediently,

CHEMIST. (34/22.)

SIR,—There has been a good deal of controversy in your columns regarding the lines on which the Minor is conducted; but my opinion is that the present "practical examination" is a thorough test, is conducted on fair lines, and therefore should not be altered. I consider, however, that the second day's examination, consisting of the theory or oral part, as at present conducted, is not the best method of testing the abilities of candidates—because (1) there are too many subjects for one day; (2) there is a tendency to cram, in the hope of pulling through; (3) the questions asked vary in a very marked degree. The remedy would be to divide the second day's examination into a two-days' written test, so that all candidates would have an equal chance, and only the best men would pass. This would prevent any passing by a fluke, and would prove a boon to any candidates who would get nervous or excited at an oral examination. The papers given in theoretical subjects could be published in the journals, and candidates would thus get a good idea of the standard of examination.

Yours truly,
SEM. LINI. (23/58.)

The C.A.A.

SIR.—The publication of the will of Mr. Herbert Meynell Bindloss recalls to the minds of many junior pharmacists of Birmingham the energy and openheartedness with which he set about the formation of a chemists' assistants' association some few years ago in that city. He came as an assistant to the well-known Bull Street firm, and gathered together a goodly number of young men, who in their subsequent meetings have shown that good work can be done by juniors in this direction. Many excellent papers have been published *in extenso* in THE CHEMIST AND DRUGGIST which were read before this Association. With his departure from the city it is regrettable to relate it has somewhat languished, and the numbers attending the meetings have gradually diminished, so much so that it is known that the meetings are attended by only a few office-bearers now, and that even Council meetings when called do not meet with better success. During the past session a Council meeting has been called on severa occasions and a quorum not formed! Financially sound, but numerically weak, one asks the reason why, for Birmingham with its 200 chemists ought to muster 100 assistants and 150 apprentices, and no doubt does; but it is feared that even the present crisis in pharmacy does not tend to promote union not only amongst the principals, but even the assistants, who possess so much more in common, for these are dependent upon the future aspects which pharmacy may assume.

ANON. (34.)

[This applies equally to London. Eight members and three press representatives were present at the last meeting in Newman Street. What is the remedy?—EDITOR.]

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

25/56. *Euphrasia*.—Daleified spirit of salt is the synonym for spiritus etheris muriatici, P.L. The modern representative of that preparation is spiritus chloroformi.

25/49. *G. P.*.—Formalin is the best thing to add to flour-paste to make it keep. One drachm of the solution is stirred into the paste when it has cooled, and before it sets.

32/40. *Spondalium*.—Ethyl-chloride spray is much used for anaesthetising the gums previous to tooth-extraction. For method of using, see *C. & D.*, February 3, 1900, page 231.

32/30. *J. P.*.—Photographic goods are best stored in glass cases, but packets of paper and plates should not be exposed to sunlight. Butcher & Son supply a nice show-case with a certain quantity of their goods; write to them for particulars.

5/26. *Urtica*. Books on Domestic Medicine.—Walters (F.R.), "Household Dictionary of Medicine," 3s. 6d. (Sonnenschein); Thomson (S.), "Dictionary of Domestic Medicine," 10s. 6d. (Griffin); Savory (J.), "Compendium of Domestic Medicine," 5s. (Lewis); "Family Physician," 21s. (Cassell).

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

31/66. Where can "auri-pigment" be obtained?

31/71. Blocks to illustrate specialities in price-lists: where obtainable? [Generally from wholesale houses or makers of goods. Any others?]

74/33. Process for fastening ends of $\frac{1}{8}$ inch square rubber to make rings 3 inches diameter.

34/26. Address of publishers of monthly magazines suitable for distribution for advertising purposes.

The Chemists' Defence Association (Limited).

THE first statutory meeting of shareholders of this company was held at the Holborn Viaduct Hotel, E.C., on March 15. The Chairman (Mr. Albert Cooper) in opening the proceedings, said that 667 shares had been allotted to chemists throughout the country, and he considered this was eminently satisfactory, as they had merely aimed to have 500 shares taken up before the first statutory meeting. The directors had appointed Mr. C. G. Moor, M.A., Exeter, to be analyst of the Association, and Mr. R. J. Beck, solicitor, as the legal adviser of the Association. The arrangement which they had come to with the analyst was that he would answer the following question once in each year for every member of the Association: "Does this article meet the requirements of the Sale of Food and Drugs Act?" Members might ask additional questions of a like character for 2s. 6d. each. Messrs. W. R. Barnes, Plaistow, E.; C. J. G. Bunker, 135 Great Dover Street, S.E.; Albert Cooper, F.C.S., 80 Gloucester Road, S.W.; T. P. Garrett, Newport (Mon.); S. N. Pickard, Bradford; P. F. Rowsell, Exeter; W. Jones, Birmingham; and F. Andrews, 34 Leinster Terrace, W., were appointed directors of the Association.

The Secretary (Mr. W. S. Glynn-Jones) reported that the directors had under consideration the alteration of Rule 6, so as to make it read as follows:—

That it shall not be compulsory on the directors to identify the Association with the defence of any particular case, but that, should they think such a course desirable in the interests of the Association, in lieu of conducting such defence, hand to the member any sum which they may consider has been reasonably expended on such defence, not exceeding 10/-.

On the motion of Mr. Bunker, seconded by Mr. Andrews, this was agreed to. The Secretary then made some remarks regarding the appointment of the analyst and the work he would do, and informed the meeting that the Association had been approached by one of the large insurance companies with regard to plate-glass insurance. In dealing with the Sale of Food and Drugs Acts, he said the directors wished to make it quite clear that they had no sympathy whatever with the fraudulent adulteration of any article, and in appointing Mr. Moor, a public analyst, they were prepared to assist the authorities to put this down. He contended that the majority of offences were committed through ignorance, and it would be part of the duty of the Association to bring before its members errors they were liable to fall into, and Mr. Moor had promised to help in this direction. Mr. Beck told him that the memorandum of association had been drawn up in such a way that the Association was not only in a position to defend cases, but also to prosecute when necessary. Mr. Moor, who was present, also made some remarks, in the course of which he said he did not think adulteration was practised by chemists in this country to any appreciable extent. The largest number of offenders under the Acts arose through chemists paying little attention to the fact that certain articles were liable to decomposition, and that the quality of others was not what it should be. He felt that chemists made a great mistake in buying drugs too cheaply, for they could hardly expect the quality of such articles to be quite up to the mark.

The Chairman (Mr. Barnett) and Mr. Pickard also commented upon this department of the Association's work. Mr. Brumwell asked about the remuneration of directors, and the Secretary replied that no remuneration whatever had been thought of, nor any emolument either of himself and Mr. Johnston. The whole subject was to be placed before the P.A.T.A., when doubtless a scheme would be drawn up whereby the expenses of running the two Associations would be divided between them, thus enabling them to do the work more economically. Mr. Moor had kindly undertaken the duties of analyst for a small retaining-fee and a scale of moderate charges for actual work done. A vote of thanks to the directors and one to Mr. Cooper brought the proceedings to a close. In putting the latter vote, Mr. Rowsell hoped Mr. Cooper would soon be helping the Pharmaceutical Council in their deliberations.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: March 22.

QUININE has been the principal topic this week, and a drop in the official price is expected if the cinchona unit declines at Amsterdam to-day. The second-hand market was "panicky" on Wednesday, but slightly steadier to-day. Otherwise business in drugs and chemicals is very quiet. German refined camphor has been advanced, although it was reduced only last week. Ipecac. remains steady, and the demand for benzoin continues. Citric and tartaric acids and cream of tartar are all quiet. The following are the principal changes of the week:—

Higher	Firmer	Easier	Lower
Oil, turpentine	Cannabis indica	Bleaching-powder	Isinglass
Rape-seed	Dragon's-blood	Oil, citronella	Quinine
Vermilion	Oil, cod-liver		Shellac
Camphor (Germ.)	Oil, linseed		
	Pot. pruss. flay.		

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom from March 15 to 21 (both inclusive):—Ariowroot (St. V.), 4,148; birdlime (Jap.), 45; bunch-leaves, 42; camphor, 72; cardamoms, 132; castor oil, (Fr.) 36, (Ital.) 71; cinchona, (Ceylon) 114, (E.I.) 193; cod-liver oil, (Newf.) 25, (Norweg.) 205; ergot, 7; gum olibanum, 35; juniper-berries, 171; kola, (W.C.A.) 16, (W.I.) 1; lime-juice, (W.I.) 217; lime oil, 5; liquorice-root, 28; nux vomica, 530; opium, 77; orris, 4; sarsaparilla, 6; semina, 15; soy (Chin.), 300; squills, 39; wax, bees', (Morocco) 20, (Cape) 2, (Fr.) 37, (Ital.) 38, (W.I.) 15, (E.I.) 42.

Commercial Sale-rooms Benevolent Fund.

The eighteenth annual meeting of the donors and subscribers to this fund was held at the sale-rooms, Mincing Lane, on March 19, when Mr. A. H. Rolls presided over a large gathering. The annual report was submitted by the Secretary *pro tem.* (Mr. Charles Barber), in which it was stated that the special effort made by the committee last year to make up the amount of invested funds to at least 10,000*l.* has been partially successful, the sum of 1,055*l.* 1*s.* 9*d.* having been received in donations. The number of annual subscribers had also increased, the income from that source improving by nearly 150*l.* The amount of the subscriptions for 1899 was 677*l.* Compared, however, with 1890 the number of claims had been increased from twelve to twenty, entailing, notwithstanding the reduced maximum grant, an annual expenditure of nearly 750*l.*, as against 530*l.* ten years ago, while the annual subscriptions do not much exceed 650*l.* The Chairman afterwards referred to the loss they had sustained by the death of their secretary, Mr. David Craven, who had taken a genuine interest in the fund from the commencement. He was ready at all times to investigate claims, was thoroughly conversant with the working of the fund, and never lost an opportunity of inspiring interest in it. Mr. Charles Barber had kindly consented to take his place meanwhile. They had also to regret the death of their treasurer, Mr. John Rains, who was eminently a Mincing-lane representative, devoting both time and money to the fund. Mr. H. W. Price had been elected to act as Treasurer. Mr. Rolls made a strong appeal in favour of the fund, pointing out that a great number of the members had not responded. He hoped that all present would endeavour to promote the fund by impressing this fact on the members. After the election of auditors Mr. H. W. Price proposed certain slight alterations in

Rules 2, 9, 10, and 14, which were carried. Four members were also elected to serve on the committee, after which votes of thanks to the committee and Chairman concluded the meeting. At and since the meeting fourteen subscribers have donated ten guineas each, and two of fifteen guineas each. Mr. Samuel Figgis has also offered 150*l.* per annum for three years if an effort is made to raise 5,000*l.* in that time.

Cinchona in Jamaica.

Mr. Fawcett, the Curator of the Botanic Gardens, Jamaica, has issued an interesting circular regarding the Government cinchona-plantations in that island, a copy of which has been sent us by a Liverpool correspondent. It appears that the rise in quinine and cinchona last year has led the Jamaican Government to consider the practicability of manufacturing quinine, as in India, but we do not gather from the circular that they have come to any decision. The whole trend of the Curator's calculations, however, goes to prove that it would not be a success. It is interesting to learn that there are no fewer than 22,470 cinchona-trees belonging to the Government, situated on the southern slopes of the Blue Mountains, and extending from the ridge at an elevation of about 6,000 feet downwards to about 3,000 feet. No cultivation has been carried on for thirteen years, consequently a dense jungle has sprung up, impenetrable except by the use of the cutlass. The plantation was originally founded by Governor Sir J. P. Grant, and practically closed its accounts in 1887, having paid for itself. The bark that could now be harvested amounts to 40,000 lbs.; but, in order to keep up a constant supply, it is recommended that only half this quantity should be taken every year. The cost in 1887 of barking, drying, and carriage to Kingston from the plantation was a trifle over 3*d.* per lb., and freight about 1*2*₁₀¹*d.* per lb., so that to avoid a loss the bark would have to realise 5*d.* per lb. The percentage of quinine in the bark is not stated, but in the present state of the market it would not pay to harvest and send to London. The Curator goes into the cost of Government-manufactured quinine, and estimated that it would take 1,200*l.* per annum to run a factory, so that it would be necessary to sell 24,000 oz. every year at 1*s.* per oz. to recoup the expenditure. But the medical department only used 3,761 oz. in 1898, and it is not explained where the extra business would come from. The conclusion seems to be that, unless there is likely to be a good local demand for the manufactured article, the matter is not worth serious consideration. After all, what is 20,000 lbs. of bark per annum? About a thousandth part of the world's needs.

The Sicilian Market.

Messina, March 9.

The market for concentrated lemon-juice and citrate of lime is unaltered at 15*d.* per pipe, f.o.b. Messina. Some speculators decline to sell at present prices, and others say they have no stocks on hand.

Essential oil of lemon, bergamot, and orange are all inactive. Prices, however, are not expected to decline further, especially for oil of lemon. The present low rates are due to the great number of merchants who for want of capital make daily sales of small quantities. If, however, the finest quality of lemon oil is wanted, extracted in the country from fruit plucked from the trees and not from box fruits (which the small manufacturers in the town make use of), at least 3*s.* 2*d.* per lb., c.i.f., must be paid, as there is a wide difference between the two qualities of oil.

Heavy Chemicals.

There are no new features of special importance to be reported as regards the heavy-chemical market this week. A very fair all-round demand is being experienced, but business is certainly quieter than it was a short time ago. Stocks, however, are not heavy, and values are, therefore, for the most part fully maintained.

ALKALI-PRODUCE.—Bleaching-powder is easier since last quoted, and now stands at 6*s.* 10*s.* to 6*s.* 15*s.* per ton for soft-wood casks on rails. The demand is brisk. Caustic soda in heavy request at unchanged rates. Chlorate of potash 4*1*₂*d.* per lb. Chlorate of soda 4*1*₂*d.* to 4*5*₁*d.* Yellow prussiate of potash dearer, at 8*1*₂*d.* per lb. for best Lancashire makes. Saltcake in heavier demand, at 2*5*₁*d.* per ton, free on rails in bulk.

BENZOLS are dull. Ninety per cent. at 7*1*₂*d.*, and 50 per cent. at 9*1*₂*d.*

MAGNESIUM-SALTS.—Sulphate (Epsom salts) continue to move well and are firm, at 6*s.* to 6*7*₁*s.* 6*d.* per ton, free on rails in bags. Carbonate, 37*s.* 6*d.* to 40*s.* per cwt. Calcined magnesia, 1*s.* to 1*s.* 4*d.* per lb. Chloride of magnesium, 60*s.* per ton.

TIN CRYSTALS steady, at 10*d.* to 10*1*₂*d.* per lb.

RECOVERED SULPHUR firm, at 4*7*₁*s.* 6*d.* to 5*1*₂*s.* per ton, in bags on rails.

SULPHATE OF COPPER steady, at 24*7*₁*s.* to 24*10*₁*s.*; Liverpool, 26*s.*

SAL-AMMONIAC unchanged, at 40*s.* and 38*s.* per ton for firsts and seconds respectively.

BROWN ACETATES OF LIME firm, at 6*l.* 12*s.* 6*d.* to 6*l.* 17*s.* 6*d.* per ton.

ALUMINA PRODUCTS in steady consumptive demand, and prices keep firm with tendency towards advance. White sulphate of alumina, purest makes, practically free of iron, 85*s.* to 90*s.* per ton in casks on rails, less usual allowances for bags or loose slabs. Crystal alum, ground, in bags 5*l.* 7*s.* 6*d.* to 5*l.* 12*s.* 6*d.*; lump, in tierces, 5*l.* to 5*l.* 2*s.* 6*d.*; and loose lump, 4*l.* 15*s.* to 5*l.* Bauxite, 60 per cent. alumina, 17*s.* to 17*s.* 6*d.* per ton f.o.b. Hydrate of alumina, of highest percentage, 11*s.* 10*s.* to 12*s.* per ton, in casks. Alumino-ferric steady, at 45*s.* to 52*s.* 6*d.* per ton. Aluminosilicate, 50*s.* to 57*s.* 6*d.* per ton. Sewage alum, 47*s.* 6*d.* to 52*s.* 6*d.* per ton. Chloride of aluminium, 11*s.* 10*s.* to 12*s.* 10*s.* per ton, free on rails in barrels. Carbonate of alumina, 35*s.* to 37*s.* 6*d.* per cwt. Aluminate of soda, highest strength Al₂O₅, 37*s.* 6*d.* to 40*s.* per cwt., according to quantity.

Liverpool Drug Market.

Liverpool, March 21.

CASTOR OIL.—A somewhat easier tone prevails for good seconds Calcutta among some holders, but one of the largest importers has withdrawn his lots from the market, and will not name a price. The value of good seconds Calcutta is 3*l.* 6*d.* to 3*l.* 12*s.* per lb. First pressure French is held for 3*l.* 4*d.* to 3*l.* 10*s.*; second pressure ditto, 3*l.* 4*d.* per lb.

GUM ACACIA is in very limited supply, and for the few parcels offering 67*s.* 6*d.* to 71*s.* per cwt. is asked.

GRAN. PARAD.—A small parcel has arrived from the producing district, but it is so mixed with porcupine quills that the importers cannot yet say how much they have to offer.

CANARY-SEED is experiencing a much brisker demand, 700 bags having been sold during the week at 33*s.* to 33*s.* 6*d.* per quarter. Holders talk of high prices in the near future.

BEESWAX.—Very full prices are being paid for the small parcels available, and 5 packages Peruvian are reported sold at 7*s.* 5*p.* per cwt.

COCHIN GINGER.—The market has been practically cleared, 95 bags selling at 30*s.* per cwt., remaining stocks being held at much higher prices.

POTASHERS.—Firmly held at 27*s.* to 27*s.* 6*d.* per cwt. Pearlashes, 33*s.* 6*d.* to 35*s.* per cwt.

HONEY continues to attract attention, and 100 barrels of Pile 1 Chilian have changed hands at 25*s.* per cwt., and 25 barrels the same grade at 25*s.* 6*d.*

SULPHATE OF COPPER is firm at 26*l.* per ton.

CHILLIES.—Sixty-five packages of fair bright Sierra Leone have been sold from the quay at 45*s.* per cwt.

QUILLIA BARK.—Firmly held at 13*l.* 10*s.* per ton.

German Drug Market.

Hamburg, March 20.

Our drug-market shows very little business at present, and there are no great changes in prices since last week.

ANTIMONY is easier, at 41*m.* to 40*1/2m.* per 100 kilos.

BALSAM PERU is unchanged, at 12*1/2m.* to 13*m.* per kilo.

CAMPION (REFINED) is very firm, refiners having raised their prices again, and now ask 43*5m.* per 100 kilos.

CITRIC ACID is a little easier, at 28*7m.* per 100 kilos.

CONDURANGO-BARK is again tending firmer, owing to small arrivals, and quotes to-day 200*m.* per 100 kilos.

ERGOT OF RYE is tending firmer, and holders again ask 450*m.* per 100 kilos, for good sound quality.

GALANGAL is quiet, at 41*m.* to 40*m.* per 100 kilos.

LYCOPODIUM continues very firm, at 470*m.* to 475*m.* per 100 kilos.

MENTHOL is dull, at 19*m.* per kilo.

COCAINE is tending firmer; to day's quotation is 450*m.* per kilo, and an advance in pure hydrochloride is expected.

SPERMACETI is steady, at 29*2m.* per 100 kilos.

WAX, Carnauba, is a little quieter, at 145*m.* to 200*m.* per 100 kilos, according to quality. Japanese is firm, at 60*m.* per 100 kilos.

OILS.—Castor is firm, but without demand, first pressing, in barrels, spot, 61*2m.*; forward, 61*m.* per 100 kilos. Cod-liver is firmer to dearer, new non-congealing oil is quoted 69*m.* per barrel. Rape oil is also firmer, duty-free at 54*m.* per 100 kilos. Essential oils show very little business, and prices are in favour of buyers.

American Drug Market.

New York, March 13.

The drug-market has been quiet, and transactions confined to jobbing-quantities. Business is, however, of average volume, and there is an absence of speculative movements.

OPIUM continues very dull, but a firmer feeling is evident, owing to cable-reports reporting damage to the crops. Values are slightly higher, and \$3.05 per lb. is asked for case lots.

QUININE remains quiet, but steady, and manufacturers continue

to quote 35*c.* to 37*c.* per oz., according to brand. Second hands offer at 33*c.* to 34*c.*

ASAFTIDA is firmer, owing to scarcity and the action of the Board of Appraisers in refusing entry to inferior grades. For the finest grades as high as 26*c.* per lb. is quoted, and cheaper grades are available at 18*c.* to 20*c.* in limited quantities.

JABORANDI LEAVES are easier, owing to new arrivals. Holders have reduced prices 1*c.*, and quote 9*c.* to 12*c.* per lb., according to quality.

IPECAC. (RIO) is selling freely at \$3.10 to \$3.20, slightly higher prices being realised owing to improved demand and the conditions abroad.

JAMAICA GINGER new crop is arriving and prices have declined to 11*c.* to 15*c.* for unbleached, and 17*c.* to 18*c.* for bleached.

ERGOT has been very irregular, owing to speculative influences. Russian has sold as low as 53*c.* per lb., but values are now firmer, and holders will not shade 60*c.*

CARBOLIC ACID has declined to 25*c.* in bulk.

SENEGA ROOT is weaker, and Western root is obtainable at 43*c.*

GOLDEN SEAL (HYDRASTIS) is in light demand, and holders are willing sellers. From 56*c.* to 58*c.* is asked, but little business is passing.

Cablegrams.

AMSTERDAM, March 22, P.M.:—At the cinchona auctions held here to-day 7,365 packages were offered, weighing 604,492 kilos., and containing 26,388 kilos. quinine sulphate (923,580 oz.). The average percentage of the manufacturing bark was 5·14 per cent. against 5·04 per cent. for the February auctions, and an average of 5·38 per cent. for the ten auctions of 1899. Of the above quantity 6,041 packages sold at an average unit of 10·05*c.* per half-kilo, against 10·65*c.* paid at the February auctions. The following were the approximate quantities of bark purchased by the principal buyers:—English and American factories, who purchased the equivalent of 6,816 kilos. quinine sulphate; Brunswick factory, 4,075 kilos.; the Mannheim and Amsterdam factories, 5,484 kilos.; the Frankfort-on-Maine and Stuttgart factories, 2,862 kilos.; and various buyers, 3,481 kilos. The prices paid for the manufacturing bark ranged from 16*1/2c.* to 90*1/2c.* per half-kilo., and for druggists' from 13*1/2c.* to 103*1/2c.* per half-kilo. The tone was steady.

* * * * *

BERGEN, March 22, 10·55 A.M.: The cod-fishing continues poor, notwithstanding fair weather. The catch numbers 8,485,000 fish, as against 12,027,000 at the same time last year. This is approximate to a yield of 9,953 barrels of unrefined oil as against 12,190. The market is firm; the price for unrefined oil being 70*s.* per barrel f.o.b. Bergen, and a further advance is expected.

* * * * *

SMYRNA, March 22, 12·35 P.M.: The demand for opium continues, the equivalent of 9*s.* to 9*s.* 4*d.* per lb. being now the price for "druggists." The stocks are becoming exhausted, and the market is consequently advancing.

* * * * *

HAMBURG, March 22, 12·2 P.M.: Refined camphor and condurango are both firmer. Cod-liver oil is advancing in value, the price being now 75*m.* per 100 kilos.

* * * * *

NEW YORK, March 22, 2·46 P.M.:—The tone of the markets is quiet. Opium has developed a firmer tendency at \$3.15 per lb. for case lots. Quinine has declined to 31*c.* to 33*c.* per oz., domestic makers having reduced their quotation. Rio ipecacuanha is slightly easier at \$2.90 per lb. Jalap is also easier owing to arrivals, 11*c.* per lb. will now buy. Mexican sarsaparilla is firmer at 9*c.* per lb., but beeswax is lower. Golden seal is easy at 54*c.* per lb.

London Markets.

ACETANILIDE.—Quiet, at from 9*2/3d.* to 9*4d.* per lb.

ACID, CITRIC.—Steady at 1*s.* 4*d.* to 1*s.* 4*1/2d.* per lb. for English crystals.

ACID, TARTARIC.—Steady at 1*s.* 0*1/2d.* to 1*s.* 1*d.* per lb. for English, and 1*s.* for foreign.

ALKANET.—Syrian is quoted at 16*s.* per cwt., c. and f. Hungarian root is worth more than double this figure.

ALOES.—About 100 boxes capey Curaçoa have arrived, which will probably be offered next week.

ARNICA.—Ordinary flowers are quoted at 24s. per cwt., c. and f. Good root is very scarce and a quotation is difficult to get.

ARROWROOT.—Dull of sale. Of 450 barrels and 20 half-barrels offered in auction only 13 barrels sold at 4d. to 4½d. per lb. for St. Vincent.

ASAFETIDA.—About fifty to sixty boxes have been sold this week at 60s. per cwt. for fair, and 40s. to 50s. for medium. Good to fine is scarce.

BENZOIN has been in steady demand since the auctions, fine Sumatra seconds selling at 9l. 15s. to 9l. 17s. 6d. per cwt., and good ditto at from 8l. 5s. to 8l. 15s. Business has also been done in Palembang gum at 28s. for common, and at 55s. and 65s. for fair. About forty cases of Sumatra have arrived.

CAMPHOR.—The reduction of 1d. per lb. last week by German refiners in order to "bear" the crude market had not the desired effect, so this week sublimers put 3d. on, making ton lots 1s. 11½d. for spot delivery, and 2s. 0½d. for forward contracts. English refined is unchanged and somewhat slow of sale at 2s. 1d. per lb. for bells and flowers in ton lots. They expect brisker business shortly, when the consuming season opens. Crude remains firm but quiet with second-hand sellers of Japanese at 17s. 6d. per cwt., c.i.f. Chinese is quoted at 169s., c.i.f., for March-April shipment. On Wednesday about 300 piculs Chinese to arrive were reported sold to Hamburg at 17l.s. to 172s. 6d. London terms.

Hong Kong advices, dated February 16, report that sales of about 3,900 cases caused a steady advance in price, which is now firm at 889, and a further rise is anticipated should Europe continue buying. The shipments to Europe since January 2 have been 210 cases; the stock is now 8,500 cases (3,500 unsold).

CANNABIS INDICA.—Since the auctions good green tops have sold at 5d. per lb., and in one quarter 5½d. is now asked. There have been several inquiries for siftings, for which holders want 3½d. to 3½d.

CINCHONA.—The Vriesseveen cinchona-bark department at Amsterdam reports the shipments from Java to Europe from February 13 to March 19, 1900, at 620,000 Amst. lbs., and from January 1 to March 19, at 1,381,408 Amst. lbs. The total shipments from January 1 to December 31, 1899, have been 11,197,995 Amst. lbs.

CINNAMON.—In auction 26 packages Ceylon offered and part sold at 8d. per lb. for coarse and 6d. for low. Of "wild" bark 621 packages offered, and 200 sold—thick bark 1½d. to 1¾d., broken quill ¾d., and thin quill 1¾d. to 2½d. per lb. Chips and bark dull of sale.

CLOVES.—In auction 32 bags Ceylon picked were bought in at 6½d. No Zanzibar offered. The market privately is very quiet, and little business has been done this week.

COCOA BUTTER.—The auctions to be held in Amsterdam on April 3 will consist of 70 tons Van Houten's, 12 tons Helm, 4 of De Jong, and 6 tons Mignon brand, while on the same date in London 100 tons Cadbury's brand will be offered.

CORIANDER-SEED.—Italian of new crop is quoted at 12s. 6d. per cwt.

CREAM OF TARTAR.—Quiet, but steady. Best white crystals on the spot are quoted 73s. per cwt., and powdered 75s.; 95-per-cent. ditto, 76s.; B.P. powder (98-per-cent.), 79s.; and 99 to 100-per-cent., 80s. per cwt.

CUBEBES.—Arrivals are coming to hand more freely on the Amsterdam market, and are offered at low prices. Business done includes 135 bales at from 12c. to 18½c. per ½-kilo, according to quality.

CUTTLEFISH-BONE.—The stock in Trieste is reported to be practically cleared, and the new crop will not be available for about four or five months.

DRAGON'S-BLOOD has a firmer tendency, fine being held for extreme prices. Several cases of good thin finger have changed hands at 9l. 15s. per cwt.

ETHER.—Methylated ethers were advanced ½d. per lb. last week as anticipated. ·750 is now listed at 8½d., and ·730 and ·735 at 8½d., in W. quarts, with ¼d. reduction for 12 Winchester quarts.

GINGER in little demand in auction. Cochin was in

moderate supply, 530 bags and 20 cases offered and 64 bags sold "without reserve" at 27s. for common rough wormy. Jamaica and St. Lucia descriptions were bought in.

GOLDEN SEAL is obtainable on the spot at 2s. 6d. to 2s. 6½d. per lb. net.

GUM ARABIC.—Persian "insoluble" gum is unchanged with sales at 19s. per cwt., quay terms, for fair "sorts." Ebeck has sold at 10s. to 14s.

GUM GUIACUM.—The sale in auction last week at 1s. 4d. per lb. "subject" was not confirmed; 1s. 5d. was afterwards paid.

GUM TRAGACANTH.—A good business has been done this week in Bagdad descriptions at full prices, samples of new goods having been landed this week.

INSECT-FLOWERS.—The arrivals in Trieste during February amounted to 378 cwt. only, whereas the sales were 946 cwt., showing that the demand had been satisfactory. Prices were firm, with the exception of some lots of fine closed flowers that were sold under market value by weak holders.

IPECACUANHA.—Steady at unchanged rates in spite of the arrivals last week. Rio has changed hands at 10s., but another holder asks 11s. 3d. After the auctions last week 7s. 6d. was paid for country-damaged Cartagena, but the general quotation is 8s.

ISINGLASS.—At auction there was little demand, holders being generally firm, especially for the large supply of Bombay, which represented more than half the auctions. Brazil sold at easier rates, and other kinds partly sold at lower rates.

LIQUORICE-ROOT.—The stock of ordinary rough Persian is practically exhausted. Good thin clean cut lengths has sold at 14s. per cwt. For fine decorticated South European from 38s. to 42s. is quoted.

MACE quiet in auction. Six packages of West Indian offered and sold at 1s. 4d. to 1s. 6d. per lb. Twelve cases Penang were bought in at 1s. 7d.. and one case Ceylon offered and sold at 1s. 5d.

NUX VOMICA.—The last quotation received for Calcutta seed was 8s. 9d. per cwt., c.i.f. About 108 packages will probably be offered in sale next week.

OIL, BERGAMOT, containing 35-per-cent. linalool ester, is quoted 6s. 6d. per lb., c.i.f.

OIL, CITRONELLA.—The market is easier inclined since the auction-sale of last week. It is reported that 10½d. per lb., c.i.f., has been refused this week for drums, 11d. being wanted. In cases 11½d. is quoted on the spot.

OIL, COD-LIVER.—Without alteration, but very firm, at 70s to 75s. per barrel, c.i.f., with small sales at the inside figure. Exporters in Norway say they are not anxious to press sales, expecting higher prices later. Our telegram reports a rising market.

BERGEN, March 17.—The news regarding the fishing shows no improvement, as for the past eight days the stormy weather has prevented the fishermen from leaving the shore, consequently no fish have been caught during that period. Lofoten non-congealing cod-liver oil may now be said to be very firm at 65s. per barrel, f.o.b. Bergen. The exports to date from Bergen are 1,424 barrels, against 1,753 barrels at the same time last year.

OILS, FIXED.—Linseed dearer at 24s. 9d. spot in pipes at waterside; landed, 25s.; barrels, 25s. Rape firmer: spot, 22s.; refined, 27s. 6d. Ravison, 23s. 9d. Cotton steady at 22s. 3d. to 23s. 3d. for refined. Cocoanut: Cochin, 28s. 6d.; Ceylon, pipes, 25s. 6d. to 25s. 9d. Palm, fine Lagos, 29s. Turpentine quiet at 40s. 6d. for American. Petroleum unaltered: spot, American, 7½d. to 7¾d.; water-white, 8½d. to 9½d.; Russian, 7d. to 7½d. per gal.

OIL, LEMON. is in more demand at from 3s. 2d. to 3s. 3d. per lb., c.i.f., for finest oil.

OIL, LEMONGRASS.—Dull of sale at 2½d. to 3d. per oz. spot.

OIL, OLIVE.—Best Lucca and Bari oils in casks of about 4 cwt. each are quoted at 66s. 6d. per cwt., e.i.f., for prompt shipment, and at from 5s. 11d. to 6s. 3d. per gal. in tins, according to quantity.

OIL, ORANGE.—Firmly held at from 7s. to 7s. 6d. per lb. for genuine.

OIL, PEPPERMINT.—Japanese dementholised, "Kobayashi" brand, is quoted 3s. 9d. per lb. spot, and 40 per cent., 5s. 10½d. to 6s. American HGH is worth 5s. 3d. spot.

OPIUM.—The London market is quiet but firm at unchanged prices for all grades.

SMYRNA, March 12.—Since our last advices severe cold weather and hard frost have set in over most parts of the interior. It is not yet known to what extent the crop has suffered, but all sellers have received telegraphic instructions from their interior clients to withdraw from the market for the present.

CONSTANTINOPLE, March 17.—As foreshadowed in our advice of March 9, the fairly severe frost experienced in this country gave interested holders a pretext for forcing up prices. They bought a few cases in Smyrna at 5 to 6 per cent. advance, and thus established a higher level. We personally do not believe in the damage. The late winter sowings may, perhaps, have suffered a little, but as a general rule the plants present very well indeed. Sellers here are very reserved, and ask 8s. 5d. to 8s. 6d. per lb., f.o.b., for ordinary druggists'. There are, however, no buyers at this. About 5 cases Hadjikeuys were sold yesterday to speculators at 9s. 3d., f.o.b.

PEPPER.—Quiet. In auction 153 bags black Singapore offered and bought in at 6½d. per lb. for fair greyish. Eleven bags Ceylon sold at 6d. to 6½d. for good. Privately, market for Singapore is inactive, with sellers on the spot at 6½d., April-June steamer at 6½d., and May-July at 6¾d. per lb. *White Pepper* is also very quiet privately.

QUICKSILVER.—A considerable business has been done this week at 9s. 12s. 6d. per bottle, there being no second-hand parcels on offer.

QUININE.—Owing to the receipt of news from the United States that severe cutting was going on between the German makers and the P. & W. brand, the latter announcing a reduction of 1d. per oz., the second-hand market here became practically demoralised, and a weak holder was reported on Tuesday to have sold 10,000 oz. at 1s. 4d.; but some allege this to be a "paper sale." The spot price to-day in second-hands was 1s. 4½d. to 1s. 4½d., but no business has transpired. The makers are waiting the result of the Amsterdam bark-auctions, at which the unit is expected to decline. In reference to the sale of 2,900 oz. Pelletier's quinine in the drug-auctions last week at 1s. 5d., the proprietors of that brand point out that their quotation is 1s. 8d., and that the sale in question referred to an old parcel in second-hands.

SALICIN.—The position is unchanged at 20s. to 21s. per lb. nominally, makers being practically without stock.

SARSAPARILLA.—Honduras is held for 1s. 7d. per lb. in one direction, but there are sellers at slightly under this figure. Of Lima-Jamaica 14 bales have arrived this week.

SELLAC.—At auction on Tuesday about 550 cases offered and met with a slow demand, second orange selling at late to easier rates, but button, "without reserve," was cheaper. The following prices were paid:—Second orange, good fair strong red 60s. to 61s. per cwt., medium flat red 58s. to 59s.; button (mostly "without reserve") resinous blocky firsts 60s. to 66s., seconds, 58s. and thirds 55s. per cwt. The market privately has been quiet, with no spot sales of importance.

TONKA BEANS.—The exports of tonka beans from Ciudad Bolivar during 1899 were 20,780 kilos. (2,910*l.*) against 107,111 kilos. (19,427*l.*) in 1898.

VERMILION.—Best English make has been advanced 1d. per lb., now 2s. 8d. for 300 lbs. and upwards, 2s. 9d. for 150 lbs., and 2s. 10½d. for smaller wholesale quantities.

WAX, JAPANESE.—Firm, with sales of good pale squares at 3s. 6d. per cwt. spot.

Cinchona=prospects in Ceylon.

Several correspondents of the Ceylon newspapers have lately been discussing the cultivation of cinchona, which is at present being neglected for the pet product—tea. One writer advocates the introduction of nutmegs and cloves, and the return to the cultivation of cinchona, which was new twenty years ago, had its day, and then disappeared as one of the unsuccessful enterprises of Ceylon. There are few Ceylon planters, however, willing to follow this advice as regards the replanting of any portion of their estates with cinchona, for so many of them burnt their fingers in

the boom of twenty years ago, and at present tea pays them fairly well. Mr. Bohringer, of Ceylon, who is one of the correspondents, is no doubt largely interested in cinchonidine, as he points out that this by-product—at one time comparatively valueless—is now as much thought of as sulphate of quinine itself; and further that it is in Ceylon, rather than in Java bark, such a by-product is chiefly found. He would therefore advise the planting up of a hardy hybrid variety, and thinks there is every prospect of prices improving rather than going back.

Russian Petroleum.

According to an official report from Baku, the total output of naphtha in that Transcaucasian Government last year was 524,200,000 poods, or 8,454,833 tons, as compared with 483,000,000 poods during the previous year (1898). The amount would have been larger but for the abnormally severe frosts in December last, which greatly retarded operations. During that month the production was 41,600,000 poods, as compared with 43,491,000 poods in the same month of the preceding year. This report does not include the naphtha-yield at Grozni, where the numerous new founts are giving a splendid yield.

The Turpentine Situation.

Advices from New York, dated February 17, report that there is a good export demand, as well as home-consumption, but at present the relief in the matter of stocks seems remote, as it is expected that the new crop will be two months later than usual. The delay is caused by the unseasonable and unusually cold weather in the South. The flow of sap, which usually begins about March 1, is not expected this year until, perhaps, May 1. A large number of trees were cut, and many of these will be killed by the frost. On this account, and because of the continued cutting of the trees for lumber and the shortage of present stock, 60c. is expected by some dealers before the new crop comes in.

Coming Events.

Tuesday, March 27.

Bradford and District Chemists' Association, County Restaurant, Bradford, at 9 p.m. "Glimpses of Lake Country Life and Scenery," with lantern illustrations, by Mr. P. Lund.

Wednesday, March 28.

Public and Poor-law Dispensers' Association, St. Bride's Institute, Ludgate Circus, E.C., at 8 p.m. Paper by Mr. S. B. Donnan on "Proteids in Urine." Mr. T. H. W. Idris, L.C.C., in the chair.

Forfarshire and District Chemists' Association, Mather's Hotel, Whitehall Street, Dundee, at 4.30 p.m. Meeting for discussion of questions of interest.

Society of Chemical Industry (Nottingham Section). Annual meeting and dinner at the Constitutional Club, Market Street, Nottingham.

Thursday, March 29.

Chemical Society, Burlington House, Piccadilly, W., at 3 p.m. Annual general meeting for the election of officers and other business. Presentation of the Longstaff medal to Professor W. H. Perkin, jun. F.R.S. At 8.30 p.m. the Bunson memorial lecture will be delivered by Sir Henry E. Roscoe, F.R.S., Vice-President.

Society of Arts, John Street, Adelphi, W.C., at 4.30 p.m. Mr. C. Rawson on "The Manufacture and Use of Indigo."

Midland Pharmaceutical Association, Mason College, Birmingham, at 8.30 p.m. Dr. A. H. Carter on "Pharmacy and Medicine."

Chemists' Assistants' Association, 73 Newman Street, W., at 9 p.m. Mr. J. A. Dewhurst "Notes on B.P. Standardisations."

Friday, March 30.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association, 100 West Regent Street, Glasgow, at 9.15 p.m. Communication by Mr. J. Thomson.

CONTRACTS.—The Strand Board of Guardians at their last meeting accepted the tender of Messrs. Hodgkinson, Prestons & King for the supply of drugs for the ensuing twelve months.—The Holborn Board of Works have accepted the tender of the Sanitas Company for disinfectants.